



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 20-May-2019 | Report No: PIDC26912

BASIC INFORMATION

A. Basic Project Data

Country Micronesia, Federated States of	Project ID P170718	Parent Project ID (if any)	Project Name Digital FSM (P170718)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date Dec 05, 2019	Estimated Board Date Mar 31, 2020	Practice Area (Lead) Digital Development
Financing Instrument Investment Project Financing	Borrower(s) Department of Finance and Administration	Implementing Agency FSM Telecommunications Cable Corporation, Department of Transportation Communication and Infrastructure, Telecommunication Regulation Authority	

Proposed Development Objective(s)

To increase access to more affordable internet, promote private sector investment in digital services and improve Government's capacity to deliver digital government services.

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	20.00
Total Financing	20.00
of which IBRD/IDA	20.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	20.00
IDA Grant	20.00

Environmental and Social Risk Classification
Moderate

Concept Review Decision
Track II-The review did authorize the preparation to continue

B. Introduction and Context

Country Context

1. **Geography and Demography.** The largest nation in the Micronesian sub-region, the Federated States of Micronesia (FSM), is made up of four semi-autonomous states (Kosrae, Pohnpei, Chuuk, Yap) located between Palau and the Philippines to the west and the Marshall Islands to the east. Although its land area covers just 700 square km, FSM consists of more than 600 islands scattered over an area of about 2.6 million square km, including its Exclusive Economic Zone.¹
2. As with other small island nations in the region, FSM faces significant challenges related to its small size, remoteness, geographical dispersion, environmental fragility and exposure to external shocks.² Frequent natural disasters and climate change impose high costs and may even threaten the physical viability of some areas of both the main islands and more remote outer islands. Such events can and do cause severe damage to infrastructure and other economic assets and have adverse impacts on livelihoods. FSM's economy is highly dependent on digital technologies to connect people across vast distances and as the key enabler for economic diversification, creating new income-generating opportunities and improving public and private sector service delivery. Digital connectivity services are essential to improve outcomes for citizens of outer islands, especially access to education, markets and health services.
3. The overall population of FSM is estimated to be 105,544 (2017), of which approximately 45 percent live in Chuuk, 37 percent in Pohnpei, 11 percent in Yap, and 7 percent in Kosrae. Although the population declined from a high of 107,432 in CY2000 through CY2011, the trend stabilized in 2012, with slight annual increases continuing through the current year.³ FSM has also experienced considerable internal migration across states, mostly from outer islands to the main islands' urban areas, and especially, to Pohnpei, which hosts the County's capital Palikir as individuals are particularly drawn to employment with the National Government. Access to basic services is also generally higher in Pohnpei.
4. **Economy and Market Considerations.** Following independence in 1986, FSM entered into a Compact of Free Association (Compact) with the United States of America (USA), whereby the USA provides yearly financial transfers to FSM and permits open migration to the USA, among other arrangements. In 2003 certain provisions, most notably the economic provisions, of the Compact were amended. The FSM Congress approved the amendments in May, 2004. The most recent agreement not only supports Compact Sector Grants designed to help sustain delivery of public services, but also establishes a Compact Trust Fund intended to replace sector grants when they terminate in

¹ An Exclusive Economic Zone is a sea zone prescribed by the United Nations Convention on the Law of the Sea (UNCLOS) over which a state has special rights regarding the exploration and use of marine resources, including energy production from water and wind.

² Systematic Country Diagnostic, Report No. 102803, World Bank, January 20, 2016.

³ World Development Indicators database, last update 9/21/2018.

2023. Through the Trust Fund, the Compact seeks to prepare FSM for self-sufficiency and economic sustainability after 2023. Nonetheless, it will be a major challenge for FSM to carry out requisite fiscal adjustments without reducing access to and quality of public services, especially those delivered to the poor.⁴

5. In 2017, GDP was about US\$336 million, which equates to some US\$3,188 per capita. Economic activity is largely supported by the Compact, but the country also receives substantial revenue from fishing license fees and most recently in corporate taxes. Personal remittances from overseas employment also contribute significant revenue (totaling about US\$24 million in 2017). In 2016, the public sector generated 25 percent of GDP; agriculture and fisheries contributed around 26 percent of GDP; and foreign grants generated 33 percent of GDP. Most private sector activity centered on the production of non-traded goods and services to the government and its employees. Most goods are imported, and there are few exports. During 2017, FSM ran a trade deficit, with the total value exports at around US\$120 million and the total value of imports at around US\$195 million.
6. FSM is reported to have the highest estimated rates of poverty among the nine small remote islands (PIC9) covered in the Regional Partnership Framework (RPF) for FY17 to FY21.⁵ These findings are based on a household income and expenditure survey conducted in 2013/14, which found about 41 percent of FSM's population struggling to meet basic needs and 10 percent living below the food poverty line. The survey also documented stark variation across FSM, with the basic needs poverty rate most severe in Chuuk (46 percent), followed by Pohnpei and Yap (39 percent) and Kosrae (21 percent).
7. **Natural Hazards and Climate Change in FSM.** FSM is at high risk of coastal flooding and typhoons and at medium risk of extreme heat and tsunamis. These conditions exacerbate the risks associated with high tides, storm surge and sea level rise. Shoreline erosion caused by sea-level rise is already a significant problem across FSM. Going forward, and according to the International Panel on Climate Change (IPCC), there is high confidence that extremes in sea level will increase with mean sea-level rise. Drought is another hazard that is already occurring during El Niño Southern Oscillation events.
8. Citizens in FSM, especially those live in outer islands, are extremely vulnerable to extreme climatic risks in the absence of reliable and resilient communications systems. Digital services are essential to facilitate the deployment of disaster risk monitoring tools and applications that require large volumes of data, and provide mechanism for early warning systems and post-disaster communications. When disasters such as typhoons strike, which is becoming more likely and frequent with a changing climate, communications services are the only 'life-line' for outer islanders to coordinate with Government, donors and NGOs on the scope of impact and the assistance response needed, including food, water, energy supply and other emergency response services. Even without disasters, reliable and secure digital service are crucial for the socio-economic resilience of local communities as the key enabler for economic activities and access to primary public and private sector services.
9. **Gender.** Women in Micronesia face multiple barriers to equal opportunities and a life free from violence and coercion. Priority areas of the Government of the Federated States of Micronesia national gender planning include addressing female unemployment and a gender-stratified labor market, teenage pregnancy, violence against women and girls, and limited access to justice and protection. The labor force participation rate for women in FSM was only 50.1 per cent as of 2000, compared with 67.2 per cent for men. The number of female wage and salary earners was less than half that of males – and women comprise only 14 percent of the non-agricultural sector.⁶ Not only are

⁴ Regional Partnership Framework FY19-21, World Bank, 2016.

⁵ Household income and expenditure survey, 2013/14, Regional Partnership Framework, World Bank, 2016.

⁶ Ibid.



women less represented in the paid workforce, they are concentrated at the lower levels of the hierarchy, with comparatively lower pay. Participation of women at the highest levels of decision making remains very limited, and women continue to be highly under-represented at the legislative and executive levels of government. In addition, FSM is one of only three countries worldwide that has zero women in parliament.⁷

10. Gender-Based Violence (GBV) prevalence levels are significant: one in three women (32.8 percent) have experienced physical and/or sexual violence by a partner in their lifetime, and eight percent have experienced sexual abuse by someone other than a partner. Fourteen percent of women experienced sexual abuse in childhood.⁸ High incidence of GBV combine with and exacerbate conditions of gender inequality and mean that women are severely constrained in their ability to negotiate a life free of coercion. Many women live under the threat of violence and this restricts their ability to move freely in the community, to use public transport, to access health and education services, and to travel to market or to the workplace. The normalization of violence has specific implications for women's trafficking risk. With limited sexual agency and high dependency on families, young women are acutely vulnerable to sexual coercion and trafficking.
11. Affordable, high-speed Internet is known to be associated with economic and social empowerment by increasing users' access to services such as employment and education opportunities and health. Access to ICT can enable women and men to gain a stronger voice in their communities, their Government and at the global level. ICT also offers women flexibility in time and space and can be of particular value to women to access information of importance to their productive, reproductive and community activities and to obtain additional resources and skills. However, analysis also shows that while Government has been engaging on gender issues, including within the ICT sector, initiatives are not well coordinated with other agencies engaged on gender issues, especially on Health and Education, or integrated with the gender engagement strategies and policies currently under development by Government. This presents a risk if the potential benefits of increased availability of ICT services are not shared equally among men and women or if new digital policies are developed without adequate consultation of all stakeholders including women. In the case of women's unequal access to participate in governance or leadership or engage in productive sectors, unequal access to ICT could lead to increased gender inequalities in economic opportunities and further diminish women's voice and influence in society.
12. To support gender mainstreaming in the design and rollout of digital government services across the FSM further analysis is needed to understand what access, information and representation gaps may exist and discuss if there are opportunities to address these gaps during the project. Work needed includes deepening the quality of underlying information, carrying out further analysis and support better decision making around ICT and gender, including a gender disaggregated study of access to affordable services and consumer survey(s) to provide a baseline for Monitoring and Evaluation (M&E) and to guide further engagement in ways that facilitate new social and economic livelihood opportunities on a gender informed basis aligned with government strategy. The focus areas identified by the gender policy strategy currently under preparation by the national Government are expected to align with the FSM National Strategic Development Plan—that includes: (a) better representation of women in decision-making; (b) elimination of gender-based violence; (c) better access to education and transition to work for both girls and boys; (d) addressing barriers facing women in the workforce; (e) women controlling their fertility and space their children; and (f) gender mainstreaming.

⁷ <http://archive.ipu.org/WMN-e/classif.htm>. Situation as of January 1, 2019.

⁸ FSM Department of Health and Social Affairs (2014), Federated States of Micronesia Family Health and Safety Study: A prevalence study on violence against women.



Sectoral and Institutional Context

13. **Access to high-speed Internet is still limited and costly for individuals and businesses in FSM.** The access to fixed broadband is provided via DSL over copper lines. On Pohnpei and Yap (with submarine fiber optic connectivity) only low-end ADSL packages are available, with services offered in the \$26/month range for 512 kbps and \$39/month for 1 Mbps. Packages offering higher residential throughputs are available, at speeds of up to 8 Mbps for \$226/month, but these tariff levels are well beyond affordability for most households. The maximum speed of 8 Mbps is also not considered a broadband service under the common standards adopted by the United States and Europe, which mandates minimum speeds of 25 Mbps and 30 Mbps respectively. For Chuuk and Kosrae, the ADSL tariff is \$33/month for a 256 kbps and \$65/month for 512 kbps. VDSL is available in some areas, but are targeted at business users with a tariff starting at \$1274/month for 1 Mbps and up to 8 Mbps for \$10,912/month. Mobile broadband 3G/4G, where coverage is available, is offered for \$30 for 2 GB and a validity of 30 days. Overall, access to high-speed Internet is limited and costly for both residential and business users.
14. **FSM has made progress over the past decade.** The passage of the Telecommunications Act of 2014 liberalized the telecommunications sector and removed the monopoly conferred on FSM Telecommunications Corporation (FSMTC) as the state-owned incumbent operator. The law also provided for the creation of the FSM Open Access Entity (OAE), known as FSM Telecommunications Cable Corporation (FSMTCC) as a wholesale only provider of backbone services. In addition, the law established the Telecommunication Regulation Authority (TRA) as the independent sector regulator. With the support of the United States Rural Utilities Service (RUS), Pohnpei was connected via the HANTRU-1 submarine cable system in 2010. Under the FSM Connectivity Project (P130592), Yap was connected to a submarine cable system in mid- 2018 and the Chuuk cable system was installed and entered service in May 2019. Work is also significantly advanced to connect Kosrae to the East Micronesia Cable (EMC) system, which is expected to enter service by mid- 2021. The EMC system is a collaboration between FSM, Kiribati (financed by IDA) and Nauru (financed by the Asian Development Bank). The FSM submarine cable systems are operated by the OAE. The OAE is the sole supplier of international and interstate connectivity services. Access is offered on transparent, non-discriminatory and cost-based terms. FSMTC retains an interest in the HANTRU-1 cable system, but only to meet its own internal needs.
15. **Performance of the FSM Connectivity Project.** Implementation of the FSM Connectivity Project has been slow due to political economy challenges and continued opposition to market-based reforms from the incumbent FSMTC. However, support has increased significantly over the past two years with greater understanding of the Project objectives, buy-in from political leadership and community appreciation of the need to increase dramatically access to high quality digital services in FSM. Implementation capacity has also improved over the past 12 months or so, particularly with the support of the Central Implementation Unit (CIU) which is assisting with core fiduciary functions including procurement, FM and safeguards. FSMTCC has also successfully recruited a new Chief Executive Officer, effective May 1, 2019, who brings significant international telecommunications experience, particularly in emerging economies and in telecom markets transitioning to competition. The TRA is working on regulations, licenses and other instruments needed to complete the implementation of the Telecommunications Law. These are expected to be complete by the end of 2019 and will provide the legal foundation needed to facilitate new market entry.
16. **Challenges remain that are constraining FSM's ability to unlock its full potential for growth of a digital economy.** Fixed broadband access remains very low at around 3 percent of the population. Mobile rollout and performance are also very low by regional standards. FSM mobile subscribers for 2018 is 21.9 per 100 and mobile broadband is 0 per 100 (ITU, 2018), which is the lowest in the Pacific region, almost 10 percentage points below the Marshall Islands

which is the next lowest for cellular subscriptions in the Pacific.⁹

Country	Mobile subscriptions (per 100)	Mobile broadband (per 100)
Tonga	99.9	59.2
Nauru	88	35.2
Vanuatu	82.5	45.4
Solomon Islands	76.1	18.6
Tuvalu	71.5	0
Samoa	63.2	26
Kiribati	39.6	32.2
RMI	30.1	0
FSM	21.9	0

17. Mobile coverage in FSM is concentrated on the four main state islands and the type of service is predominantly only voice/sms (GSM). In the past two years 3G has been rolled out around main population centers and recently LTE has been deployed in and around Kolonia and Palikir in Pohnpei, although uptake remains very low. Poor network performance significantly constrains the ability of FSM to rollout out digital services. Cost is also a serious issue. The affordability target for entry-level broadband services in developing countries is less than 2% of monthly gross national income per capita (ITU – UNESCO Broadband Commission). The cost of broadband services in FSM is well above this threshold. The entry-level ADSL 512 kbps, well below the usual definition of a broadband service, constitutes 10% of monthly gross national income per capita. Globally in developing/emerging markets, mobile broadband services typically cost below \$1 to \$5 per GB. In comparison, in FSM the cost for a basic monthly service is around \$15/GB. The combination of relatively poor performance and high prices is a key factor driving low penetration rates of digital services in FSM.
18. **Government has taken strong steps that demonstrate a commitment to sector reform and development.** The OAE and the TRA have both been established and made operational. Government continues to provide substantial levels of operational funding to support their viability and effectiveness during the initial startup phase. The TRA is working on developing the regulatory framework needed to promote competition and support new market entry by international operators, including the introduction of a licensing framework, spectrum and technical regulation, and interconnection and access rules. The regulatory framework is expected to be finalized and introduced by March 2020, which includes national and international consultations with existing operators and potential entrants. The Digital FSM is a second phase project to further strengthen the performance and reach of the sector. It will include domestic infrastructure which is expected to lower investment risk and extend a level playing field for all operators to provide high quality, low cost services to all people in FSM. Essential facilities will be provided by the OAE as a neutral, wholesale only provider to minimize duplication and market uncertainty. Support for digital government services and the digital economy, including digital skills, are also expected to increase the demand for digital services.
19. **Government recognizes the importance of digital government and that the foundations for this are not yet in place in FSM.** A holistic “whole of government” approach is proposed to establish common standards and provide access to shared services across all five governments (National and four state governments). As a first step a high-level Steering Committee will be established to guide and oversee the development of digital government in FSM.

⁹ <https://www.itu.int/net4/itu-d/icteye/CountryProfileReport.aspx?countryID=83>



Members are expected to include Secretaries from the National government from the Departments of Finance and Administration (DOFA), Communications and Infrastructure (DTCI), Justice (DoJ), Health (DOH) and Education (DOE) and, representatives from each of the four state governments and the National Government gender division. Significant efforts will be needed to establish the critical foundations and platforms to deliver prioritized digital services to citizens and residents. Most government transactional services, for example, obtaining birth, marriage and death certificates, registering a business, or paying taxes, are still manual and paper based. Little work has been undertaken to digitize internal government document flows. There is no standard document management system nor standard government email, and the development of information systems has so far been fragmented at the department/agency levels both at the national and state government. Ministries do not have access to dedicated IT resources, except where it is linked to externally financed aid. Most departments have a website, but content is very limited, often outdated, and there is no common standard/look and feel. There are no data management or data protection standards in place. Transactional online services are not available and there is no digital payments platform for government services.

20. **Government will develop a Digital Government Strategic Framework and Implementation Roadmap.** The development of a Digital Government Strategic Framework will be led by DTCI, which will be responsible for coordinating and consulting with key ministries at the National and State government levels. It will have the following objectives: (i) implement Digital Government across priority Government agencies and activities; (ii) advance digital inclusion for all FSM citizens; (iii) strengthen governance and efficiency; (iv) promote data sharing and a service-oriented information systems architecture; and (v) enhance citizen engagement. The ultimate focus will be on improving Government business process and workflow efficiencies, improving the quality of life for citizens and residents, while reducing the complexity for businesses transacting with Government. Work on the Framework is expected to begin in 2019 and should be delivered by the end of 2020 or early 2021. It will promote the use of digital technologies within Government departments and agencies, including the transition from paper-based transactions to digital Government. As Government data and information is transitioned to a digital format, FSM will benefit from a new, modern model of ICT delivery for all agencies. This model is expected to enable a far more integrated, shared, accurate, and inclusive information flow within and across all Government agencies and also support open data initiatives in the future. s.
21. **Establishing an authoritative core population registry is important for digital government and the digital economy.** A key first step on the path to digital government and the digital economy is to provide a means for the digital authentication of identity, which may be achieved through a number of different means including online federated ID systems, which link an individual's digital identity to multiple distinct data sets to establish uniqueness, or centralized systems which may build on and link civil registration data to a single ID dataset which can be used to establish uniqueness. An identification system, particularly to enable approved public and private service providers to authenticate the identity of their customers digitally, in real time, is a critical enabler for digital government and the digital economy. For the purposes of digital government, identification systems may also enable people to reliably assert their legal identity in contexts such as education, health and social services, employment, elections, immigration, property ownership and banking. There is currently no digital ID system in FSM. The ability of people in FSM to access online government and commercial services will be dependent on the development of an effective ID system that enables them to authenticate their legal identity and thus establish trust in an online environment, including through electronic signatures.
22. **An integrated Government digital platform will need to be developed to consolidate multiple independent systems.** Business registration land registration and administration, social systems, taxation and education, for example, are not accessible online. The interface between these existing systems will need to be developed, in



addition to the Government ICT architecture to support the more widespread and systematic rollout of digital services. Such architecture would provide common enablers needed by most electronic and mobile services such as identity authentication, business authentication, digital ID integration, content management, electronic payment services, data services, notification services etc. Using such enabling tools, Government departments could potentially save 30-40 percent of the time needed for online service implementation and could reduce their overall ICT cost by 20-30 percent, based on experiences in other countries. As part of the development of the Digital Government Strategic Framework, Government will identify its highest priority frontline services that could be deployed in the next 2-3 years.

23. **Integration and consolidation of multiple systems does not reduce the level of control by data owners or managers.** The adoption of a common approach to IT systems and processes will reduce costs and improve functionality and resilience. However, it does not mandate changes to existing responsibilities and mandates for data management, access or service delivery. Existing agencies may continue to carryout their existing functions and responsibilities. Strict privacy and data protection controls may be included in the design of the system and prescribed by law to ensure that only relevant departments and individuals who are responsible for managing service level systems and processes have access to relevant data. The migration to common platforms nationwide does not mean that the national government will have access to data held and managed by state government(s) or that data within one national department can be read by another.
24. **The legal and regulatory enabling environment needs to be developed to support the rollout of digital government service and online transactions.** FSM does not currently have the laws needed to support electronic transactions or to regulate privacy, data protection, cybersecurity or cybercrimes. The existing FSM Connectivity Project includes support to develop and enact these reforms, but progress has been slow. As Internet use increases, Government will increasingly grapple with digital content and data governance related issues, including cyber security, cybercrimes, data protection, data privacy and keeping users, especially vulnerable groups including children, safe online. Data governance is an immediate policy priority. Reforms are needed to accelerate to facilitate the digital transformation and put in place data protection safeguards to strengthen privacy, prevent the misuse of data and give people in FSM the trust and confidence to access digital government services and participate in the digital economy.
25. **Inclusive, trusted and universal identification systems are pre-requisites for social inclusion.** Target 16.9 of the Sustainable Development Goals (SDGs) emphasizes the need to “provide legal identity for all, including birth registration” by 2030. This can only be achieved through strengthening civil registration systems and linking civil registration with identification systems. Strong identification systems are also essential to countries’ economic development, security, governance, and efficient delivery of services, including development of the digital economy. People without an effective means to prove their identity face significant barriers accessing education, financial services, healthcare, social welfare benefits, and participating in economic development and civic engagement. As such, identification serves, as a key enabler of government services the economy, are critically important for eradicating poverty and achieving a broad range of development outcomes.

Relationship to CPF

26. The Project is closely aligned with the Bank’s twin goals of ending extreme poverty and boosting shared prosperity. The transition to digital government services is predicated on shared prosperity, particularly improving access for the most vulnerable people including citizens living in remote areas. The project will facilitate increased access to high quality, low cost digital connectivity services, which is important for social and economic growth and development. There is a strong relationship between access to broadband services and economic growth. Extreme poverty and lack



of access to basic public services are well established. In FSM and other small, remote island nations, digital communications services are the essential lifeline connecting families, providing access to basic services and linking people to markets. Improving access and the internet and expanding the availability of digital government services is a high priority for Government and a core focus of this Project.

27. The Regional Partnership Framework (RPF) for FY17 to FY21, which was approved in February 2017, covers nine small Pacific Island Countries (PIC9)¹⁰, including FSM. The RPF identifies four areas of focus for these PIC9 as: (i) fully exploiting the available economic opportunities; (ii) enhancing access to economic opportunities for all; (iii) protecting incomes and livelihoods; and, (iv) strengthening the enablers of growth and opportunities (macro-economic management, infrastructure and addressing knowledge gaps). The Project will support focus areas (i) objective 4.2 that aims to increase access to basic services and improved connectivity infrastructure; (ii) objective 4.3 that addresses knowledge gaps and data issues. The Project will also support focus area (iv) by expanding access to broadband services. Through the strategic development of digital technologies and provision of public data, the Project will also support more efficient and effective management of government institutions which would contribute to improved development outcomes in multiple sectors and programs supported under the CPF.
28. The scope and objective of the Project is also aligned with several key Government development objectives set out in the FSM's Telecommunications Sector Policy (2012) and Infrastructure Development Plan for FY2016-FY2025 (IDP). The aims of the policy have been taken into consideration when identifying and prioritizing projects in the IDP. Goal 2.3.7 of the IDP is to provide telecommunications systems infrastructure to: (1) achieve accessible and affordable communications for all; (2) strengthen ICT human resources and increase human resource development opportunities through ICT; (3) improve economic growth and sustainable development through ICT; (4) utilize ICT for good governance; and (5) create an enabling ICT environment through policy reform and improved legal frameworks.
29. FSM is at high risk of coastal flooding, typhoons, earthquakes and tsunami events. In addition, critical infrastructure, particularly terrestrial communications facilities, are at risk of flooding and typhoon hazards. The Project will ensure all infrastructure under the project is resilient to climate related events, it will also aim to systematically improve climate resilience in FSM through a program of activities that cover both climate adaptation and mitigation.
 - (a) *Climate adaptation.* The Intended Nationally Determined Contribution (INDC) for FSM highlights that adaptation is a priority, and that the formulation and implementation of transformational adaptation investment plans to protect the country against climate change, are necessary. Proposed tools include: (i) sectoral planning tools informed by climate change and natural disasters; (ii) more climate resilient communications infrastructure; (iii) measures to strengthen the enabling environment to improve climate resilience; and (iv) contingent emergency response. The overarching objective is to improve the climate resilience of communications infrastructure, including early warning and emergency response systems. The Digital FSM project will contribute to improving disaster relief efforts by increasing the likelihood that communications are available in the aftermath of a disaster, helping Government, NGOs and first responders assess the impact and coordinate aid.
 - (b) *Climate mitigation.* Improved availability of high-quality digital services contributes to reducing greenhouse gas (GHG) emissions by facilitating e-meetings and access to essential services online, reducing the need for travel especially airline and maritime travel on which FSM is currently heavily dependent. In addition, in its

¹⁰ Kiribati, Republic of Nauru, Republic of the Marshall Islands, FSM, Republic of Palau, Independent State of Samoa, Kingdom of Tonga, Tuvalu and Vanuatu.

INDC, FSM has committed to unconditionally reduce its GHG emissions by 28 percent by 2025, relative to the year 2000. Relative to the year 2000 inventory, electricity generation accounting for the largest share of total carbon dioxide equivalent emissions (42 percent). Where appropriate, the Project will seek to support energy efficient/renewable energy activities, such as installing photo-voltaic systems (PV panels) to power communications infrastructure, including mobile base stations, microwaves, etc., and PV panels and battery storage facilities to reduce dependence on backup diesel generators.

C. Proposed Development Objective(s)

To increase access to more affordable internet, promote private sector investment in digital services and improve Government's capacity to deliver digital government services.

Key Results (From PCN)

- (1) Terrestrial fiber passed 80% of premises across all four states
- (2) Access to mobile voice and mobile broadband services covering 42 outer islands with 100+ inhabitants
- (3) National Digital Government Framework Developed (Yes/No)
- (4) Government digital platform developed and operational at National and State level (Yes/No)

30. **The Theory of Change.** FSM needs to improve access to high quality, low cost Internet services, transform government practices from siloed, paper-based activities to digital services, and support the rollout of digital government services and the development of the digital economy. The project uses a three-pronged approach to deliver these changes: (1) supply-side (connectivity) interventions to increase core backbone infrastructure; (2) demand side (digital government and digital economy) interventions to increase availability and access to key services online; and (3) helping to develop a robust enabling environment (policy and regulation, institutions and skills) to build trust and confidence in digital services. It is expected that through these interventions, the Project will generate a positive impact contributing to national (and regional) integration, inclusive social and economic growth and development, the creation of new jobs, improved services, increased access to services and increased country competitiveness.

31. Specific project outcomes will include improved digital connectivity and country-wide digital infrastructure, including underserved areas and outer islands, increased private sector investments in the ICT sector, strengthened leadership and institutional capacity of government in digital solutions, improved and expanded provision of digital government services, and improved climate resilience and adaptation.

32. Project outputs will include deployment of fiber optic networks, microwaves, remote mobile sites and other critical connectivity infrastructure, improved investment climate to mobilize private sector investments in the sector, the development and implementation of the planned Digital Government Strategic Framework, strengthened legal and regulatory enabling environment to build trust and confidence in digital services, strengthened capacity of the National government gender division to mainstream gender and gender inform policy development and rollout, development of programs to train citizens with the skills that needed to succeed in a digital economy, and increased public awareness and participation in the digital economy.

33. Some critical assumptions include: (1) there is no weakening in Government readiness to promote new investment in digital infrastructure and services or delay in actions to introduce new competition and license new telecom operators; (2) private sector willingness to invest in new national connectivity services, (3) Government commitment

to transform its operations and service delivery using shared digital infrastructure and platforms; (4) interest of citizens, especially women, to engage in digital innovations, and (5) readiness of development partners to support common standards and protocols for Government digital infrastructure and information systems.

D. Concept Description

34. The Project components will be structured as follows:

Component 1. National Digital Connectivity Infrastructure (US\$12 million)

This component is designed to improve digital connectivity by supporting the establishment of climate and disaster resilient national backbone networks and to connect outer islands¹¹ to mobile broadband 4G LTE services.

Component 2. Digital Government Platform (US\$6M)

This component will finance a range of interventions and investments beginning with the development and implementation of a nationwide Digital Government Strategic Framework.

Component 3. Enabling environment for Digital Government and Digital Economy (US\$1.5M)

This component will provide technical assistance for the development of the legal and regulatory enabling environment needed to underpin the investments in digital government and the digital economy.

Project Management (US\$0.5M).

This component will finance the Project management unit (PMU) within DTCl. The PMU structure has been established under the FSM Connectivity project, but additional expertise for the Digital FSM Project may be needed

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

OP/BP4.03 Performance Standards for Private Sector Activities will not apply to this project. The PPP will operate under the ESF and the safeguards instruments prepared under the project. Screening has identified that the proposed PPP arrangement is not likely to meet the criteria for applying OP 4.03 because of the limited capacity of the Borrower to manage two environmental and social management systems (one under ESMF and one under OP4.03) and the uncertain capacity of the private entity yet to be identified.

¹¹ Those outer islands with a population of greater than 100

Note To view the Environmental and Social Risks and Impacts, please refer to the Concept Stage ESRS Document.

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APPROVAL

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Approved By

Practice Manager/Manager:		
Country Director:		