

Document of
The World Bank

Report No: ICR00003498

IMPLEMENTATION COMPLETION AND RESULTS REPORT

(IDA-H5500, TF-96582, TF-97221)

ON A

GRANT

IN THE AMOUNT OF SDR 2.1 MILLION
(US\$3.25 MILLION EQUIVALENT)

TO

SOLOMON ISLANDS

FOR A

TELECOMMUNICATIONS AND ICT DEVELOPMENT PROJECT

September 29, 2015

Transport and Information and Communication Technologies (ICT) Global Practice
Solomon Islands
East Asia and the Pacific Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2015)

Currency Unit = SBD
US\$ 1.00 = SBD 7.7558
\$1.38 = SDR 1

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

\$	All dollars are in United States dollars unless otherwise indicated
3G	Third-generation (mobile telecommunication)
ADSL	Asynchronous digital subscriber line
ADB	Asian Development Bank
AusAID (now DFAT)	Australian Agency for International Development (integrated into Australian Department of Foreign Affairs and Trade in November 2013)
GDP	Gross Domestic Product
ICT	Information and communication technologies
IOC	Incremental operating costs
ISR	Implementation Status and Results Report
ITU	International Telecommunication Union
FM	Financial management
Kpbs	Kilobits per second
MG	Megabyte
Mbps	Megabits per second
MCA	Ministry of Communications and Aviation
MoFT	Ministry of Finance and Treasury
PAD	Project Appraisal Document
PDO	Project Development Objectives
PRIF	Pacific Regional Infrastructure Facility
RAMSI	Regional Assistance Mission to Solomon Islands
SIG	Solomon Islands Government
STL	Solomon Telekom Limited
TCSI	Telecommunications Commission of Solomon Islands
UA	Universal access
UAF	Universal access fund

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SOLOMON ISLANDS
Telecommunications and ICT Development Project
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MAP. IBRD 33482R	

A. Basic Information			
Country:	Solomon Islands	Project Name:	SB: Telecommunications and ICT Development Project
Project ID:	P113148	L/C/TF Number(s):	IDA-H5500,TF-96582,TF-97221
ICR Date:	09/28/2015	ICR Type:	Core ICR
Lending Instrument:	TAL	Borrower:	SOLOMON ISLANDS GOVERNMENT
Original Total Commitment:	USD 3.25M	Disbursed Amount:	USD 3.24M
Revised Amount:	USD 3.25M		
Environmental Category: C			
Implementing Agencies: Telecommunications Commission			
Cofinanciers and Other External Partners: Department of Foreign Affairs and Trade (DFAT)			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	10/09/2008	Effectiveness:		08/19/2010
Appraisal:	02/08/2010	Restructuring(s):		11/14/2013 03/26/2015
Approval:	04/06/2010	Mid-term Review:	10/26/2014	
		Closing:	03/31/2015	03/31/2015

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Satisfactory
Risk to Development Outcome:	Moderate
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Satisfactory	Government:	Moderately Unsatisfactory

Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	Moderately Satisfactory
Overall Bank Performance:	Moderately Satisfactory	Overall Borrower Performance:	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	Indicators	QAG Assessments (if any)	Rating
Potential Problem Project at any time (Yes/No):	Yes	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Satisfactory		

D. Sector and Theme Codes		
	Original	Actual
Sector Code (as % of total Bank financing)		
Public administration- Information and communications	100	100
Theme Code (as % of total Bank financing)		
Infrastructure services for private sector development	67	67
Other rural development	33	33

E. Bank Staff		
Positions	At ICR	At Approval
Vice President:	Axel van Trotsenburg	James W. Adams
Country Director:	Franz R. Drees-Gross	Kanthan Shankar
Practice Manager/Manager:	Randeep Sudan	Philippe Dongier
Project Team Leader:	Natasha Beschorner	Natasha Beschorner
ICR Team Leader:	Junko Narimatsu	
ICR Primary Author:	Junko Narimatsu	
	Alan G. Carroll	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)

To facilitate increased access to a wide variety of reliable and affordable telecommunications services for the majority of the Solomon Islands population, through efficient and well-regulated competition.

Revised Project Development Objectives (as approved by original approving authority)

Not revised

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Improved ICT policy environment in the country			
Value quantitative or Qualitative)	Basic Telecoms Policy in place, as adopted by Cabinet in 2008	Policy capacity in Ministry		Policy staff recruitment incomplete. ICT & Broadcasting Policy drafted.
Date achieved	03/04/2010	03/04/2015		03/31/2015
Comments (incl. % achievement)	Partially achieved. Indicator was mis-specified as an outcome rather than as a measurable or observable value, and the target value was vague and subjective. Draft policies were submitted to Prime Minister in June 2015 for endorsement.			
Indicator 2 :	Legal and regulatory framework more effective at delivering sector performance			
Value quantitative or Qualitative)	Law enacted; no regulations	Regulations enforced and updated		Regulations enforced and updated
Date achieved	03/04/2010	03/04/2015		03/31/2015
Comments (incl. % achievement)	Achieved, but indicator was mis-specified as an outcome rather than as a measurable value. e.g. regulation for Transitional License Fee made in 2010; prescriptions for radio spectrum and class licenses updated; & four administrative orders issued			
Indicator 3 :	Increase in the level of competition in the ICT sector			
Value quantitative or Qualitative)	Incumbent monopoly	2+ telecom operators		2
Date achieved	03/04/2010	03/04/2015		03/31/2015
Comments (incl. % achievement)	Fully achieved. Sound competition amongst the operators on quality of services, prices and coverage. Fifteen other class licensees registered as of March 2015.			
Indicator 4 :	Increase in teledensity			
Value quantitative or Qualitative)	8	40		66
Date achieved	03/04/2010	03/04/2015		03/31/2015

Comments (incl. % achievement)	Target surpassed, achieving 165 percent of original target.			
Indicator 5 :	Decrease in tariffs of key communications services			
Value (quantitative or Qualitative)	February 2010 tariffs for local mobile calls; calls to Australia; & 128kbps Internet access	Reduced tariffs for stated services		Reduced tariff for domestics and international for voice and data. See intermediate indicators for actual values.
Date achieved	03/04/2010	03/04/2015		03/31/2015
Comments (incl. % achievement)	Fully achieved. Local mobile calls, calls to Australia and internet prices declined.			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	New ICT policy framework formulated and adopted			
Value (quantitative or Qualitative)	Basic sector policy	Yes (ICT policy framework and capacity in place)		No
Date achieved	03/04/2010	03/04/2013		03/31/2015
Comments (incl. % achievement)	Not achieved. ICT Policy Framework formulated but awaiting endorsement by the Prime Minister and adoption by parliament. Recruitment for MCA's ICT Director/Deputy Director positions are still ongoing. Original target date in PAD was Year 3.			
Indicator 2 :	Head of Commission and staff appointed			
Value (quantitative or Qualitative)	None	Yes		Yes
Date achieved	03/04/2010	03/04/2011		03/31/2015
Comments (incl. % achievement)	Achieved. First Commissioner appointed in February 2010, and second Commissioner appointed in June 2011. There are 6 staff, the Commissioner, 4 professional staff (Finance Manager, Director Market Competition, Regulatory Resources and Spectrum Manager)			
Indicator 3 :	Spectrum management plan			
Value (quantitative or Qualitative)	None	Yes		Yes
Date achieved	03/04/2010	03/04/2011		03/31/2015
Comments (incl. % achievement)	Achieved. Spectrum Management Plan completed in 2015. Database using ITU SMS4DC near completion.			

Indicator 4 :	Numbering plan			
Value (quantitative or Qualitative)	None	Yes		Yes
Date achieved	03/04/2010	03/04/2012		03/31/2015
Comments (incl. % achievement)	Achieved. In 2014, TCSI announced the National Numbering Plan for Solomon Islands (Communications of 5.V.2014, E.164 National Numbering Plan for country code +677, ITU). Not tracked in ISR.			
Indicator 5 :	Interconnection regime			
Value (quantitative or Qualitative)	Yes	Yes		Yes
Date achieved	03/04/2010	03/04/2012		03/31/2015
Comments (incl. % achievement)	Achieved. Interconnection regime in place and functioning. Interconnection agreement between STL and Bemobile signed on April 2010.			
Indicator 6 :	Dispute and mediation procedures			
Value (quantitative or Qualitative)	None	Yes		No
Date achieved	03/04/2010	03/04/2012		03/31/2015
Comments (incl. % achievement)	Not achieved. Dispute resolution and mediation procedure in drafting progress. TCSI attends to ad-hoc cases.			
Indicator 7 :	Award of third license			
Value (quantitative or Qualitative)	1	2		Not deemed appropriate
Date achieved	03/04/2010	03/04/2012		03/31/2015
Comments (incl. % achievement)	Unofficially dropped. This indicator was not deemed necessary given the size of the market and early stage of competition. Baseline value presumably means 0 and target value 1. Bid for third mobile operator license dropped by TCSI in 2011.			
Indicator 8 :	Award of other telecommunications licenses			
Value (quantitative or Qualitative)	1	3		16
Date achieved	03/04/2010	03/04/2013		03/31/2015
Comments (incl. % achievement)	Target surpassed, achieving over 500 percent of original target. Baseline value presumably 0 and target value 2. This was not tracked in the ISR. The end value includes STL, Bemobile, Internet service providers and other class licensees			
Indicator 9 :	Percent of population coverage by mobile networks			
Value (quantitative or Qualitative)	11	80		89
Date achieved	03/04/2010	03/04/2013		03/31/2015
Comments (incl. % achievement)	Target surpassed, achieving over 111 percent of original target. End target incorrectly recorded in ISRs as 40.			

achievement)				
Indicator 10 :	Mobile subscribers per 100 people			
Value (quantitative or Qualitative)	8	40		66
Date achieved	03/04/2010	03/04/2013		03/31/2015
Comments (incl. % achievement)	Target surpassed, achieving 165 percent of original target.			
Indicator 11 :	Mobile 3 minute local call rate (US\$)			
Value (quantitative or Qualitative)	1.20	1.08		0.56
Date achieved	03/04/2010	03/04/2012		03/31/2015
Comments (incl. % achievement)	Target surpassed. 53 percent price reduction achieved. End target in PAD was - 10 percent by Year 2, which value would be \$1.08			
Indicator 12 :	Price of call to Australia (US\$ per 3 minutes)			
Value (quantitative or Qualitative)	3.60	3.06		2.44
Date achieved	03/04/2010	03/04/2012		03/31/2015
Comments (incl. % achievement)	Target surpassed. 33 percent price reduction achieved. End target in PAD was - 15percent by Year 2, which value would be \$3.06			
Indicator 13 :	Internet service (128kbps), business monthly rate (US\$)			
Value (quantitative or Qualitative)	169	118.3		108
Date achieved	03/04/2010	03/04/2015		03/31/2015
Comments (incl. % achievement)	Target surpassed. 36 percent price reduction achieved. End target in PAD was - 30 percent by Year 2, which value would be \$118.3.			
Indicator 14 :	National Universal Access objectives and strategy			
Value (quantitative or Qualitative)	None	Yes		None
Date achieved	03/04/2010	03/04/2015		03/31/2015
Comments (incl. % achievement)	Not implemented. This is due to TCSI's strategic decision. TCSI assessed that development of the local market has been satisfactory including in rural areas, and there is no existing need for a supply-side UA policy.			

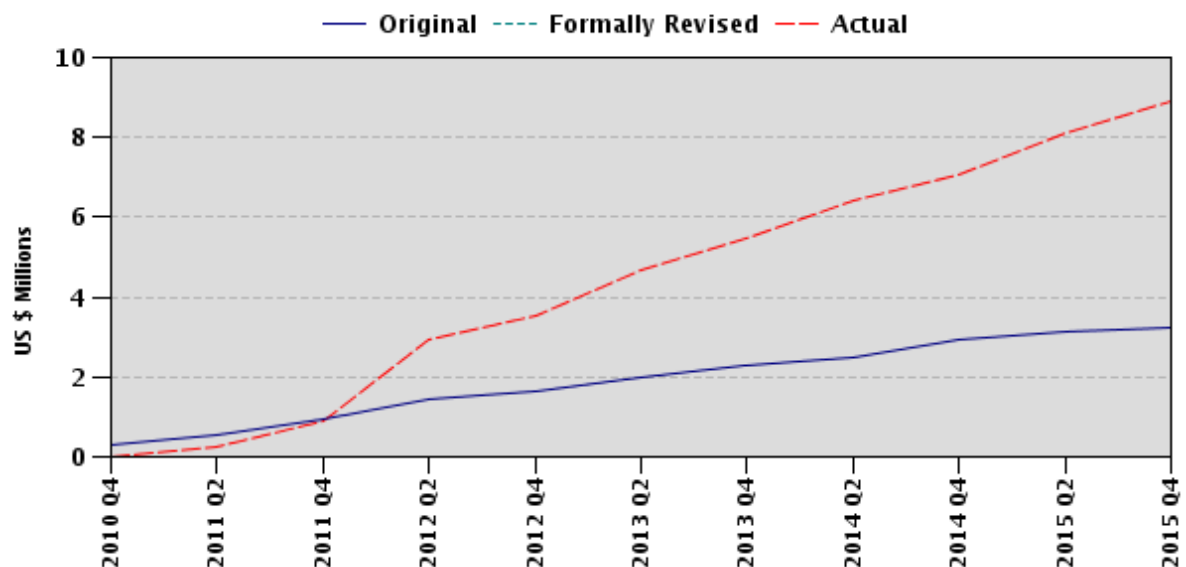
G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	05/01/2011	Satisfactory	Satisfactory	0.65
2	03/01/2012	Satisfactory	Moderately Satisfactory	1.59
3	12/26/2012	Satisfactory	Moderately Satisfactory	2.09
4	06/22/2013	Satisfactory	Satisfactory	2.35
5	12/23/2013	Satisfactory	Satisfactory	2.91
6	07/08/2014	Satisfactory	Satisfactory	3.12
7	10/12/2014	Satisfactory	Satisfactory	3.24

H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
11/14/2013		S	S	2.79	Modify the definition of "Incremental Operating Costs"
03/26/2015		S	S	3.24	Clarification of modified definition of "Incremental Operating Costs"

I. Disbursement Profile



1. PROJECT CONTEXT, DEVELOPMENT OBJECTIVES AND DESIGN

1.1 Context at Appraisal

1. **Country context:** Solomon Islands gained independence from the United Kingdom in 1978, and consists of 992 islands of which one third are populated. In 2010, it had a population of around 526,000 (World Bank), which remained highly dispersed across the main provinces of Guadalcanal, Malaita, Makira, Santa Isabel, each consisting of many islands, and numerous other rural and outer islands. The geographic dispersion has presented significant challenges for developing infrastructure in remote areas, and the provision of essential services has been costly and limited to urban centers. Further, due to its remoteness, Solomon Islands has remained largely isolated from global markets, resulting in the economy being heavily based on logging and aid. The bulk of the population depends on agriculture, fishing, and forestry for most or part of its livelihood. In 2006, around 22.7 percent lived under the national poverty line.¹

2. Solomon Islands is classified by the World Bank as a fragile and conflict affected state. In 1998, a mixture of economic stagnation, political decay, and ethnic tensions between the two largest groups—the Gwale and the Malaitans—turned into political turmoil and civil unrest. This led to a near collapse of public administration, and a reversal of the growth experienced during the previous decade. The Townsville Peace Agreement was signed in 2000, brokered by Australia and New Zealand. Subsequently, the Regional Assistance Mission for Solomon Islands (RAMSI) was mobilized in 2003 to support the government in restoring order and rebuilding government institutions. This helped to dramatically improve the outlook for the economy, with GDP growth averaging 7 percent between 2003 and 2008. However, growth again stagnated, due to various factors, including falling international demand for logs, and the GDP declined by 2.25 percent in 2009.²

3. **Sector context:** At the time of project preparation, Solomon Islands was one of the least connected countries in the world, and costs of telecommunications services were high for average citizens. Until December 2009, Solomon Telekom Limited (STL) held a complete monopoly of both fixed, wireless and data services, the restoration of infrastructure after the civil unrest was progressing slowly as well as the building of new infrastructure, particularly outside Guadalcanal. In 2009, the total population covered by telecommunications networks was only about 8 percent, which was significantly lower compared to over 90 percent in Fiji and Samoa, and over 80 percent in Vanuatu; these countries had already liberalized their telecommunications markets. Further, a one-minute local mobile phone call cost around \$0.40 in a country where gross national income per capita was just \$1,537 (PPP, 2011). Internet access was primarily via dial-up. There were fewer than 1,000 fixed (ADSL) broadband subscribers in the country, and mobile Internet was not available at the time.

4. **Government strategy:** In the late 2000s—with assistance from development partners including the World Bank, Asian Development Bank (ADB) and RAMSI—the government embarked on a comprehensive program to reform loss making state owned enterprises, with an aim to improve efficiency

¹ World Bank data

² Solomon Islands Growth Prospects: Constraints and policy priorities, October 2010, <http://siteresources.worldbank.org/INTPACIFICISLANDS/Resources/SourcesofGrowthSummary.pdf>.

of service delivery, reduce costs and stimulate private investment.³ Energy (Solomon Islands Electricity Authority), water (Solomon Islands Water Authority), and telecommunications (STL) were the three sectors targeted. In 2008, the government adopted a new telecommunications sector policy (“Policy”) which had been prepared with the technical support of the World Bank and Australia, with an objective to modernize and expand the country’s telecommunications networks and services, enhance economic and social development, and integrate the country internally as well as with the regional and global economy through: (a) increased competition; (b) strengthened regulatory capacity; and (c) expanded rural access to communications services and Internet applications.

5. In accordance with the Policy, the government invited STL to renegotiate the terms of its exclusive license, and a settlement agreement was signed on June 26, 2009 to terminate STL’s monopoly. In September 2009, the Telecommunications Act 2009 (“Act”) was approved by the Cabinet, which established the Telecommunications Commission of Solomon Islands (TCSI) as the independent regulatory body for the industry, and enabled the provision of mobile and fixed line services to be opened to competition. In accordance with the Act, TCSI reports to the Ministry of Communications and Aviation (MCA), but remains independent of direction of the government in its statutory powers and functions. In December 2009, Bemobile Solomon Islands was awarded the second mobile network operating license. In February 2010 the first Commissioner took office, and in August 2010 Bemobile launched its operations in Solomon Islands.

6. **Rationale for Bank Involvement:** Despite these solid foundations that established the transition to a competitive market, the government faced a number of challenges towards achieving its development objectives for the sector. These included:

- (a) *Need for transitional funding to support the operations of TCSI. TCSI was expected to be self-financing from license fee income.* However, under the terms of the Settlement Agreement between the Government and Solomon Telekom Ltd, this revenue was not to become available at least until the first quarter of 2015, given that license fees from other operators were to be used in part-fulfilment of the government’s obligations to pay compensation to STL.⁴ Hence, transitional funding was required to support TCSI for a period of around five years.
- (b) *Need to ensure that a robust regulatory framework and institution was put in place.* This was particularly critical to help manage the transition from a monopolistic to a liberalized market and that licensed operators would meet the needs of consumers in terms of access, pricing and quality of services
- (c) *Inadequate capacity to, proactively, regulate and promote the development and implementation of a growing Information and Communication Technologies (ICT) sector agenda.* The Telecommunications Commission of Solomon Islands (TCSI) was a brand new institution, and

³ In early 2009, MoFT launched the Government-donor Core Economic Working Group supported by the WBG, ADB, and RAMSI, which effectively paved the way for a coherent Government-donor dialogue on crucial economic and fiscal matters.

⁴ Following are the arrangements that the Solomon Islands Government had agreed with STL relinquishing its monopoly: (a) a direct compensation payment (SBD 85.6 Million) to be funded from payments by the national budget, the National Provident fund and other donors (SBD 24 million), refund of 2009 license fees under the old Telecommunications Act (approximately SBD 8 million), and the balance (SBD 53.8 million) from license fees through the period ending 2014; and (b) a five-year, annually declining community service obligation payment (fixed in total at SBD 22.59 million) to ensure continuity of services for regions that are loss making that is to be funded from an already approved grant from the PRIF (\$1.5 million) plus a supplementary grant for which the government intends to apply.

the legal, regulatory, technical and managerial expertise required to run it were not available locally in Solomon Islands, and were unlikely to be in the short- to medium-term.

- (d) *Limited ICT policy leadership, implementation capacity, and resources in the government to deliver on its ICT vision and related action plan.* Solomon Islands still lacked a coherent national ICT policy to support and increase effectiveness of the Telecommunications Act. Further, MCA lacked the capacity to provide a coordinated approach that is supported by the entire government.

7. The World Bank in partnership with then AusAID and RAMSI had already been advising successive governments of Solomon Islands on telecommunications issues since 2004. These include:

- (a) Initial sector assessment, 2004;
- (b) Advice on options for liberalization, including review of the legal framework and STL's license, 2004-2006;
- (c) Advice on policy best practices, 2008; and
- (d) Advise on best practices in telecommunications law and regulation; and defining the main elements of regulatory functions, 2009.

8. The Bank's continued engagement in the sector was deemed essential for consolidating the important gains since 2004 to take the sector's performance to the next level. Further, the Bank was able to provide a flexible response to the government's need for a combination of technical and financial support to the sector where no other funding sources were available. Finally, the Bank had extensive experience with supporting similar telecommunications reform projects, including in countries in Africa, Latin America, and in similar small island economies in the Caribbean and in the Pacific (e.g. Fiji, Samoa, Vanuatu).

9. **Higher level objectives to which the project contributed:** The Project was intended to improve connectivity, an important development enabler in a fragile state seeking to achieve economic recovery and improved social cohesion. The project was deemed consistent with the World Bank's Regional Engagement Framework 2006-2009,⁵ in particular: strengthening government capabilities in service provision and improving the incentives for private sector-led growth and employment. Further, a stand-alone World Bank Group (WB/IFC) Interim Strategy Note for Solomon Islands 2010-2011⁶ was approved by the Board on March 12, 2010, in which improving telecommunications infrastructure was mentioned as one of the three medium-term objectives for the strategic area "Addressing Surmountable Barriers to Growth." The WBG's support to the TCSI was mentioned as one of the key programs that would help address issues of institutional capacity. The project was also aligned with the government's Medium-Term Development Strategy, which prioritized, among others, pursuit of the Millennium Development Goals through improving service delivery. By promoting good governance in the telecommunications sector, the Project aimed to pave the way for more widespread application of ICTs that would support economic and social development.

1.2 Original Project Development Objectives (PDO) and Key Indicators (*as approved*)

10. The project development objective stated in the IDA Financing Agreement and the Project

⁵http://imagebank.worldbank.org/servlet/WDSContentServer/IW3P/IB/2005/05/09/000012009_20050509112554/Rendered/PDF/32261.pdf

⁶ http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/03/24/000334955_20100324023920/Rendered/PDF/534960ISN0P118101Official0Use0Only1.pdf

Appraisal Document (PAD) is “to facilitate increased access to a wide variety of reliable and affordable telecommunications services for the majority of the Solomon Islands population, through efficient and well-regulated competition.”

11. Key Outcome Indicators Linked to the PDO were:

- (a) Improved ICT policy environment in the country
- (b) Legal and regulatory framework more effective at delivering sector performance
- (c) Increase in the level of competition in the ICT sector
- (d) Increase in teledensity
- (e) Decrease in tariffs of key communications services

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

12. The PDO was not revised during the Project.

1.4 Main Beneficiaries

13. The direct beneficiaries were to be the TCSI and MCA, which would benefit from the financing support and increased technical capacity for regulatory and policy development in telecommunications and ICTs. Additionally, the institutional, regulatory, and policy frameworks that were to be improved in the course of the Project stood to benefit the entire population of Solomon Islands, by increasing access to and reducing costs of telecommunications services.

14. **Revised:** None

1.5 Original Components (as approved)

15. The project was built around the provisions of the Act. In brief, the Act provides for: (a) a pro-competitive, multi-operator environment, (b) establishment of an independent regulator, and (c) establishment of a universal access fund (UAF) to support extension of services beyond commercially viable boundaries. The estimated total Project cost was US\$5.99 million over five years, out of which SDR 2.1 million (US\$3.25 million equivalent) was funded by a grant from the International Development Association (IDA) and AUS\$3million (US\$2.74 million equivalent) from Australia through the Pacific Regional Infrastructure Facility Trust Fund (PRIF). On top of that, a PRIF grant of US\$3.0 million was added to pay in part the compensation to STL to maintain its rural fixed line services as it transitions to operate in a competitive market structure.⁷

⁷ In the course of negotiations with STL, STL’s loss-making customers and existing community service obligations were identified as significant issues requiring resolution. STL estimated that the total cost of maintaining such obligations over the following five years would be around US\$3 million. A detailed economic and financial analysis was undertaken to support this. The SIG agreed in principle to include provisions for covering these community service obligations for a five-year period in order to unblock this bottleneck to liberalization. In parallel with the IDA- and PRIF cofinanced Telecommunications and ICT Development Project, the Government requested US\$3.0 million in additional external financing to cover these costs. The payments would be made on an annual basis, subject to receipt of audited accounts.

16. The Project components as described in the PAD were as follows.⁸

- (a) **Component 1. Sector Policy Support, US\$0.3 million** comprised technical assistance for the MCA, in consultation with other ministries and agencies as appropriate, to develop a policy capability for telecommunications, and information communication technologies (ICT) in a broader sense. The Ministry was to recruit a telecommunications, and prospectively ICT, Policy Director and Deputy. The Project was to provide advisory assistance and technical guidance to the Ministry in the following areas:
- (i) Review and update of the telecommunications and ICT Policy after a period of experience with the current Policy. The review and update were to be in line with observed industry developments and government objectives (whether continuing or revised) and were to consider international best practices, including second generation reform and technological convergence;
 - (ii) Development of governance arrangements for scarce resources and policy approaches toward wider access and use;
 - (iii) Over time, adjustments to the broader ICT legal and regulatory framework, and any fiscal incentives that may be relevant to the environment. This was to include a needs assessment for secondary legislation;
 - (iv) Supporting the government's work on international agreements related to telecommunications, including possible regional connectivity programs;
 - (v) Participation in international agreements related to telecommunications (International Telecommunications Union, submission of World Trade Organization commitments).
- (b) **Component 2. Regulatory Support, US\$4.962 million** comprised operational support as well as advisory assistance and capacity-building for TCSI. The technical and managerial skills required to run it were not available in the Solomon Islands and were unlikely to be in the short- to medium-term. The major skills were therefore to be outsourced to internationally recruited specialists, given the pressures of the changing telecommunications market. At the same time, every effort was to be made to identify and recruit national counterpart staff in order to take on technical/regulatory functions in the medium-to long-term. The component was to finance:
- (i) The Commissioner (an internationally-recruited, in-line salaried position).⁹ The Commissioner was to be tasked with the development of a regulatory regime including necessary subsidiary legislation and regulatory instruments, structures, tools, capabilities and governance arrangements;
 - (ii) Core professional and administrative staff of TCSI;
 - (iii) Technical assistance to TCSI to develop a complete regulatory regime, including all necessary regulatory instruments, structures, tools, capabilities and governance. This was to include advisory assistance for TCSI in key areas such as:
 - (iv) Issuance of telecommunications service and radio spectrum licenses and other authorizations, and monitoring compliance with licenses and regulations;

⁸ The project description was summarized in the Financing Agreement, but was substantially the same.

⁹ The first Commissioner commenced work in Honiara on February 1, 2010.

- (v) Planning, allocation, and management of radio spectrum (including broadcast), telecommunications numbers, and Internet domain names;
 - (vi) Technical regulation including interconnection, radio apparatus, and telecommunications equipment;
 - (vii) Monitoring competitive behaviour, including resolving disputes between operators and protection of users; arbitration and mediation services, as required; and
 - (viii) Related regulatory matters including emerging needs linked to changes in the industry, market, technologies and international best practices.
 - (ix) For the first year, priority areas for support were to be: telecommunications market intelligence, verification of mobile license coverage obligations, review of the licensing framework, and preparation for the tender of a third mobile license. Provision of equipment, including computers, and specialized software for spectrum management and monitoring;
 - (x) Funding of specific training and overseas development visits for TCSI staff; and
 - (xi) Recurrent/operational costs and expenses of TCSI.
- (c) **Component 3. Technical Assistance for Universal Access, US\$ 0.3 million** was intended to commence after year 3 once the commercial rollout of telecommunications infrastructure and services were more clearly established. The program was to be sustained through the use of the 2 percent universal access (UA) levy established under the Act that was to be activated after 2014. The Project was to finance technical assistance for MCA and TCSI in the following areas:
- (i) Develop a UA policy, including stakeholder consultations;
 - (ii) Develop the necessary regulatory instruments, instructions and practical procedures to implement the provisions of the Act in relation to UA, including procedures for the UA Fund;
 - (iii) Identify, analyse, and design of possible UA projects;
 - (iv) Design and implement programs to raise awareness, and to train women using telecommunications and ICTs to improve livelihoods
- (d) **Component 4. Project Management, US\$0.395 million** included support for: (a) Project management consultants—project coordinator, financial management consultant and procurement consultant—working together with national staff to form a Project Management Unit within TCSI; and (b) project audit.

1.6 Revised components.

17. Components were not revised during the Project.

1.7 Other significant changes

18. **Complementary PRIF financing:** As mentioned in section 1.5, the original Project had two sources of funding under Bank administration: the IDA Grant H5550 in the amount of SDR 2.1 million (US\$3.25 million equivalent), and a cofinancing from Australia by a PRIF grant TF097221 AUD 3.0 million (US\$2.74 million equivalent). Both sources of funding were designed to contribute across all components under the project. In addition, a parallel PRIF grant TF096582 of US\$3.0 million

(TF096582) was added in two tranches of \$1.5 million in October 2010 and 2012, to provide compensation to STL as stipulated in the Settlement Agreement, to maintain its loss making fixed line services outside of Honiara, also called the community service obligations. Payments were to be made on an annual basis, subject to receipt of audited accounts by STL. TCSI was responsible for carrying out the technical/service audits. This complementary grant did not change the scope of the original project.

Source of funds	Currency	Grant Amount	Closing date
IDA H5550	USD	3,250,000	March 31, 2015
PRIF TF097221	USD	2,740,000	March 31, 2015
PRIF TF096582	USD	3,000,000 (\$1.5m + \$1.5m)	June 30, 2014

19. **Amendments to the definition of incremental operating costs:** A level 2 restructuring to amend the Financing Agreement for IDA-H5500 and the Grant Agreement for TF097221 was approved in November 2013 to modify the definition of incremental operating costs (IOC). The modification included the addition of financing of arrears for membership fees in international organizations for which TCSI is legally obliged under the Telecommunications Act 2000, and other changes to add clarity and granularity to the definition. A second amendment to TF097221 was approved to in March 2015, to include further granularity to the definition of membership fees.

2. KEY FACTORS AFFECTING IMPLEMENTATION AND OUTCOMES

2.1 Project Preparation, Design and Quality at Entry

20. **Soundness of background analysis:** The preparation of the project was thorough and formed the basis for the execution of the Project. An experienced team of experts from the World Bank prepared the project, with financial and advisory support provided by RAMSI and then AusAID. The Bank team had been advising the government in establishing a pro-competitive telecommunications market in Solomon Islands since 2004, and was knowledgeable of the country specific issues. In addition, thorough financial viability and sustainability assessments were undertaken, which concluded that ongoing costs of TCSI from 2010 through 2014 would be sufficiently met by the Project. The assessment also concluded that projected revenues beyond 2015, including from spectrum license fees, telecommunications service license fees, among others, would be sufficient to fully finance the operations of TCSI.

21. **Assessment of project design:** The project design adequately took into account lessons learnt from ongoing telecommunications reform projects in neighboring countries, including Vanuatu, Samoa, Tonga and Papua New Guinea and was kept simple and adapted to the limited government capacity. The Bank and the government considered but rejected two other approaches: (a) expanding the UA component to include a demonstration project (subsidy funding) for expanding rural access; and (b) support for national and international backbone development. The reasons for the rejection were: (a) it would be more appropriate to focus on the enabling environment for commercial expansion of telecommunications services in the first instance, then focus on processes and mechanisms for use of the proposed UAF; and (b) support for regional connectivity would be more appropriately addressed under a separate, more regionally-focused project. As a result, the Project was primarily designed as an institutional development project for establishing regulatory and policy capabilities. Realistic challenges of recruiting skilled staff were fully acknowledged, and appropriately addressed.

22. The UA component appropriately incorporated lessons from the successes in Africa, Latin America, and South Asia. However, while this component was deemed important, the project acknowledged that it would also be important to ensure that timing is appropriate. Therefore, it was

decided that the implementation of this component would be deferred until at least the commercial trajectory for services rollouts was clear, which was estimated at around the third year of the Project. Nonetheless, there was no timeline/process embedded in the project design to make a decision formally to revisit the provision of this component.

23. A unique feature of the project was that 90 percent of the project funds were allocated under component 2, which were development/operating costs for TCSI. The simplicity of the project led to the project's ultimate success, but it also caused some issues that arose concerning the eligibility of incremental operating costs. Although a Development Policy Operation (DPO) could have been considered to help the government pay off the obligations to STL, thus avoiding the need to fill the financing gaps of TCSI's operating costs, it is doubtful that the conditions at the time would have made this workable. More importantly, the project's design enabled the Bank's continued, sustained engagement on sectoral issues, which was essential in the context of weak capacity and political fragility. However, the fact that the project primarily financed TCSI's operating costs intrinsically posed challenges of attribution of the project's stated objectives, and as discussed in section 2.3 some of the PDO indicators were not properly specified as measurable or observable indicators.

24. **Adequacy of Government's commitment:** The Solomon Islands Government's (SIG) political will and commitment to establishing a pro-competitive framework were demonstrated by the actions it had taken during the years before the Project's approval. Preparation of the Project involved extensive consultations with concerned government agencies, including the Ministry of Finance and Treasury (MoFT) and MCA. The government took proactive steps to complete the recruitment of an international Commissioner, before project appraisal, whose first key tasks were to recruit TCSI's professional staff.¹⁰ At the time of project preparation, MCA was committed to recruiting qualified staff within its Ministry who would be responsible for implementing the policy component.

25. **Risk assessment:** Based on the country's political and economic fragility and limited institutional capacity, the overall project risk was assessed as High at appraisal. The following three specific risk factors were rated High: (a) Inability to attract and retain suitable professional staff at TCSI; (b) limited experience and capacity of implementing entity; and (c) lack of procurement experience and staff. These risks were mitigated by the appointment of an internationally-recruited Commissioner before appraisal in February 2010, and by making the appointments of a qualified project coordinator, FM specialist, and procurement specialist in the Project Management Unit effectiveness conditions of the IDA grant. Australian financing was mobilized to help complete these recruitments. The FM risk was rated Substantial, and it was agreed that financial management supervision would be conducted by the Bank FMS at least three times in the first year and the frequency after that would be determined by the findings from these supervisions. Overall the risk assessment at appraisal was adequate.

2.2 Implementation

26. The project was implemented successfully in that it achieved (and in some instances surpassed) most of its PDO and intermediate indicator targets. Disbursements progressed on track throughout the Project. By July 2014, 8 months before Project closing, \$3.12 million had been disbursed from the IDA grant, representing over 96 percent of the IDA grant proceeds, and \$1.16 million/42 percent (TF97221)

¹⁰ These initial start-up costs of around \$540,000 were financed by RAMSI and AusAID.

and \$2.68 million/89 percent (TF96582) were disbursed from the two grants.¹¹ As of this ICR 99.6 percent of the total funds have been disbursed.

27. TCSI was generally able to recruit, retain or replace qualified international and national staff throughout the duration of the Project.¹² TCSI is composed of six staff, the Commissioner, four technical staff (Finance Manager, Director of Market Competition, Regulatory Resources, and Spectrum Manager) and a receptionist/cleaner.

28. Nevertheless, implementation of the policy component remained slow, and the universal access component was not implemented as stipulated in the project description and was never restructured. The key factors that affected implementation of these components were the following:

- (a) **Limited readiness of the MCA for policy development and coordination.** Weak capacity of MCA persisted throughout the life of the Project, resulted in delayed outputs and limited impact under Component 1. An international ICT policy advisor was recruited under the project in November, 2012, but this assistance was persistently hampered by a lack of counterparts within MCA. In addition to multiple responsibilities the Secretary was responsible for broad oversight of the ICT policy. There were several attempts to recruit a Director and Deputy Director for MCA's ICT policy unit, however due to a lack of qualified candidates, this was not completed by the project closing. Voids on policy matters led to lost opportunities to develop understanding of increased public and private sector demands for ICT services. Some of these voids were partially filled by the ICT Support Unit of TCSI and MoFT, which was primarily responsible for inter-government communications (including the government network and ministry websites).
- (b) **Delayed establishment of the Consultative Group.** The establishment of the inter-ministry monitoring group (the "Consultative Group"), which was a grant covenant intended to provide oversight of the Project and coordinate overall sector reforms, was delayed significantly. The Group—chaired by the Chief Technical Advisor of the ICT Support Unit ICT (MoFT) and consisting of members from the Attorney General's office, Television Board, and TCSI—was not established until mid-2012. According to available records, the group met only four times until the project closing date. This resulted in limited government oversight of the Project, particularly on the policy component and project management.
- (c) **Sector evolution.** Dialogue on the UA component continued throughout the project, however, it was not implemented due to continuing investments by the private sector operators to expand their networks and the resulting improvements in access and coverage that were achieved in rural and remote areas. TCSI's assessment—with which the Bank did not disagree—was that implementing a UA scheme would distort the market, and the ongoing 3G rollouts by the operators into provincial centers were creating alternative demand side measures to assist remote communities' access to internet services. However, the component scope remained unchanged throughout the Project period, and the funds allocated to it were mainly used to support the

¹¹ As at this ICR, project disbursements were: \$8.93 million, which consists of \$3.244 million/99.8 percent (IDA H5500), \$2.684 million/97.97 percent (TF97221), and \$3 million/100 percent (TF96582).¹¹

¹² The first Commissioner resigned due to personal matters effective June, 2011, subsequently the second Commissioner was appointed. The project coordinator changed twice.

regulatory component, including payment of International Telecommunications Union (ITU) membership fees and arrears since 1990.¹³

- (d) **Delays surrounding the establishment of a submarine cable connection.** The proposed submarine cable (to be financed by ADB and the private sector) was initially to be completed by end-2013. However, there were continuous delays in finalizing the routing/financing options, and it is now estimated that the cable would not be ready until end 2016 or early 2017. While the delays/uncertainties did not have an effect on project implementation, it is worthwhile to note that consistent efforts were made by TCSI/SIG to plan for the proposed cable, including its reflection on policy and regulatory instruments that were linked to project components. The lack of a submarine cable in Solomon Islands has also kept bandwidth pricing high for the average citizens and small businesses. In the interim, given accelerating demand for Internet bandwidth and more affordable Internet services, STL launched in April 2015 a 200 Mbps capacity with O3B Networks, a medium-earth orbit satellite provider, and Bemobile is also exploring satellite options.¹⁴

2.3 Monitoring and Evaluation (M&E) Design, Implementation, and Use

29. **Design:** Arrangements for M&E were made specific in the PAD and were adequate overall. The indicators generally were supportive of the outcomes stated in the PDO. Baseline data were collected and used in project design and to assess progress during project implementation. TCSI carried out its responsibility for the collection of the information required to monitor and evaluate progress of the Project. Under the Act, TCSI has access to industry data such as tariffs, financial statements, subscriber numbers, revenues earned, services offered and interconnection agreements. The one notable shortcoming of the original results framework was that the PDO indicators “improved policy environment in the country,” and “legal and regulatory framework more effective at delivering sector performance” were not properly specified as measurable or observable indicators, and the end target values were vague and subjective.

30. **Implementation and use:** M&E remained satisfactory throughout Project implementation. TCSI’s capabilities were supported and strengthened by the Project that financed the implementation of a Business Intelligence Monitoring System and associated training. By 2012, TCSI had successfully implemented the system, which became an effective tool to develop capacity to collect and analyze information for its ongoing purposes. TCSI’s Director of Markets and Competition updated the database monthly, and, upon request, TCSI staff provided key monitoring indicators to the Bank team. The one shortcoming was that the two poorly specified PDO indicators mentioned above were not revised.

¹³ TCSI Project Report No.9, October 1 to March 31, 2015.

¹⁴ The Solomons Oceanic Cable Company, established in 2011 with equity participation from STL and the National Provident Fund, had sought financing from the ADB and commercial banks for a submarine fibre-optic cable from Solomon Islands to Sydney, plus two spurs to connect Gizo in Western Province and Auki in Malaita province. Asian Development Bank. 2012. *Project Agreement (Broadband for Development Project)*. <http://www.adb.org/sites/default/files/project-document/74989/44382-022-sol-pa1.pdf>

2.4 Safeguard and Fiduciary Compliance

31. **Safeguards:** As a purely capacity-building project with no works or other physical effects, the Project was rated Category C, and no safeguard policies were triggered. No safeguards issues arose during implementation.

32. **Procurement:** Procurement activities were rated Moderately Satisfactory through the life of the Project. TCSI was unable to identify a suitable local or international procurement specialist, thus procurement responsibilities were assumed by the Project Coordinator. Despite initial delays, the PIU/TCSI effectively managed 11 individual contracts by the project closing (consulting services 6, goods and services 5). The project had limited procurement activities after 2011, since most of the financing was spent on TCSI's recurrent operating expenses.

33. **Financial Management (FM):** FM activities under the Project were rated Moderately Satisfactory, with the exception of January 2012, when the rating was dropped to Moderately Unsatisfactory. This was due to delays in fully adopting the accounting system and the quantum of ineligible expenditures that were identified in 2011 (see paragraph 34). The accounting systems was fully implemented by mid-2012 and remained acceptable to the Bank. Through the life of the Project, there were a number of delays with submitting the IFRs as well as the Project audit.¹⁵ Nonetheless, FM reviews suggest that the documentations submitted were generally of good quality, and the Project Implementation Unit/TCSI maintained a qualified FM specialist throughout the project.

34. A number of ineligible expenditures were identified in 2011, which eventually were resolved through formal amendments of the definition of incremental operating costs, provision of missing documentation, and reimbursements to the Bank. The final amount of ineligible expenditures that were returned to the Bank by 2014 for this first instance of ineligible expenditures amounted to US\$107,878.

35. In July 2014, the Bank's FM review identified another set of potential ineligible expenditures, which required investigation and resolution. It was identified that a portion of the new premises leased by TCSI had been subleased to an external business, with personal connections to a staff member of TCSI, in the amount of SBD 9,000 a month (about 16 percent of the total lease payments). These arrangements started in April 2014, and the sublease payments were made to TCSI on a month-to-month basis. It was eventually agreed that the income received from the sublease would be offset against TCSI's rental payments, thereby reducing the amount financed by the Bank. As of August 2015, these issues were fully resolved.

36. Although none of these matters had effect on the results of the project, they caused inefficiencies and some unproductive tensions between TCSI and the Bank team during the latter half of the project.

2.5 Post-completion Operation/Next Phase

37. The project was designed to be fully self-sustainable at completion; following the assumption that the transitional funding required from the World Bank to support the operations of TCSI would no longer be required after March 2015.¹⁶ However, the delayed launch of Bemobile by around seven months

¹⁵ As at this ICR, audited financial statements for 2014 that were due on June 30, 2015 remain outstanding.

¹⁶ Under section 133 of the Telecommunications Act, the transitional funding began with the issue of STL's new license on December 7, 2009 and would have expired on the earlier of, the date the fixed compensation is satisfied,

resulted in corresponding delays in the start of payment of license fees. As a result, the TCSI's receipt of license fees would not become available until October 16, 2015. In a letter dated September 17, 2014, SIG requested an extension of the closing date by 12 months to April 1, 2016, given the additional time needed to implement components 1 (policy) and 3 (UA). A mutual understanding was reached between SIG and the World Bank to not process this request. This was due to the pending issues surrounding the second set of ineligible expenditures at the time that the extension was being discussed. As explained in section 2.4., these issues were subsequently resolved.

38. To maintain its operations in the “gap” period between the Project closing and the resumption of license fee revenue, TCSI issued on April 1, 2015 a “Notice of Funding Deficit” to the Accountant-General stating that pursuant to section 133(4) of the Act, TCSI will have a funding deficit from April 1, 2015 to October 16, 2015, and therefore will be accessing the licensing revenue to fund its own operation during that period, which would have otherwise been used to pay the outstanding compensation which the Government still owes to Solomon Telekom. This totaled approximately SBD14 million (approx. \$1.76 million). As of September 2015, MoFT was in the process of seeking legal advice from the Attorney General's Chambers regarding this issue.

39. Initial discussions for the World Bank to cofinance the proposed submarine cable, as part of an existing Pacific Regional Connectivity Program, took place during the early stages of project implementation. However, SIG eventually requested the World Bank's support in eGovernment. Preliminary discussions for a possible follow-on operation were held between the Bank and SIG during the last year of the Project. It was discussed that, with increased ICT market maturity and ability of individuals to access more affordable communications services, there is an opportunity in Solomon Islands to use ICTs as tools to help build greater capability of government institutions, and promote greater accountability to and engagement with citizens. As of this ICR, the government had withdrawn its request due to changes in priorities for the use of IDA resources. It is worthwhile to note that DFAT is now providing support to the MoFT ICT Support Unit under its Solomon Islands Governance Program.

3. ASSESSMENT OF OUTCOMES

3.1 Relevance of Objectives, Design and Implementation

Rating: High

40. By fostering wide coverage of telecommunications services that are affordable to the vast majority of the national population, the project is fully aligned with the World Bank Group's twin goals of ending extreme poverty and fostering shared prosperity. The Project remains highly relevant to the World Bank's current Country Partnership Strategy for Solomon Islands 2013-2017, which is built around two main engagement areas: (a) strengthening economic resiliency; and (b) improved service provision. The Country Partnership Strategy specifies 13 outcomes, of which the Project firmly supported Outcome 6: Improved access to ICT services and efficient ICT policy framework. The Project is also consistent with the Solomon Islands' National Development Strategy 2011-2020, which has an overarching theme of building better lives for all Solomon Islanders by setting out three broad goals: increasing social and economic opportunities, securing sustainable growth, and maintaining stability and peace.¹⁷ In particular, the increased access to affordable ICT services has helped to build a foundation

or 15 days after the end of the calendar quarter in which the fifth anniversary of new entrant's launch of services occur.

¹⁷ http://www.sihc.org.nz/SiteAssets/documents/Solomon_Islands_National_Development_Strategy_2011%20-%202020.pdf

for encouraging equitable distribution of economic benefits across the country, particularly in the remote outer islands. These achievements will also contribute to fostering growth through ICT-enabled private sector development and economic diversification.

41. In addition, the Bank's engagement objectives are also consistent with the World Bank Group's ICT Sector Strategy of 2012, in particular the Connect pillar, which objective includes the promotion of competition in the telecommunications sector to attract private investment, and increase affordable access.

42. The project's design remained largely relevant, especially its primary focus on maintaining a strong, independent regulator, operating according to recognized international standards, to oversee the early transition from a monopoly to a competitive market. The ICT policy component remained highly relevant despite the counterpart capacity limitations. The UA component remained relevant, considering the need to improve service delivery and increase social and economic opportunities in rural and remote areas of the country. However, given the achievements in extending rural coverage by the two mobile operators, the UA component could have been re-scoped or replaced by other activities. Nonetheless, the financial amount involved was minor and thus does not represent a significant lost opportunity.

3.2 Achievement of Project Development Objectives

Rating: Substantial

43. The PDO contains two main outcomes: (a) increased access to reliable and affordable telecommunications services for the majority of the population, and (b) establishment of efficient and well-regulated competition.

44. **Increased access to reliable and affordable telecommunications services for the majority of the population:** The outcome achieved for this part of the PDO is rated Satisfactory. Two PDO indicators are related to this outcome: (a) increase in teledensity, the target for which was greatly surpassed (66 percent vs. 40 percent); and (b) decrease in tariffs of key communications services, which were also achieved (see paragraph 45).

45. This outcome is also supported by achievement of four other intermediate indicators whose targets were all surpassed: percent of population coverage by mobile networks, price of three-minute local call rate, price of three-minute call to Australia, and monthly business rate for Internet service (128kbps). In particular, the expansion of the network coverage is a significant achievement given the logistical challenges of network rollout and maintenance in rural and remote islands. While Internet service charges remain high compared to income levels, both STL and Bemobile have rolled out 3G services (mobile broadband Internet) in major urban centers, and retail prices for Internet services are continuing to drop as a result of the fierce competition. Specific outcomes include the following:

(a) Increase in teledensity was achieved. Teledensity/mobile subscribers per 100 people, increased from 8 percent to 66 percent of the population, greatly surpassing the PDO target of 40 percent.

- (i) The intermediate indicator on the percent of population coverage by mobile networks was achieved. Mobile network coverage increased from 8 percent of the population in 2009 to 89 percent in March 2015, surpassing the end target of 80 percent.

(b) Decrease in tariffs of key communications services was achieved.

- (i) Price of a three-minute domestic mobile call has fallen from around US\$1.20 to US\$0.56, surpassing the end target of US\$1.08.
- (ii) The price of a three-minute international call to Australia fell from US\$3.60 to US\$2.44, surpassing the end target of US\$3.06.

- (iii) The price of a 128kbps Internet service business monthly rate decreased from US\$169 in 2010 to \$108 in 2015.¹⁸¹⁹

(c) Project outputs relevant to this outcome include the following:

- (i) TCSI allocated the remainder of the Global System for Mobile Communication (GSM)²⁰ spectrum to Bemobile and STL due to their demands for additional capacity to improve service quality, introduce 3G mobile broadband, and expand service coverage across the country.
- (ii) TCSI, with legal services supported under the project, played a crucial role in intervening with Bemobile in 2010 when it failed to meet the network rollout/coverage obligations as per the schedule set forth in its license agreement.
- (iii) TCSI's decision not to impose price regulations fostered healthy competition between operators to lower prices based on consumer demand.
- (iv) TCSI undertook the task of physically investigating STL's performance of its rural fixed-line obligations during the five years that the compensation remains payable. The activities were supported by key ICT equipment and motor vehicles/vessels that were procured under the project.

46. The nonimplementation of Component 3 is not considered a shortcoming in terms of achievement of the project's outcomes. This small component was originally intended not to finance implementation of UA, but only development of a UA policy, related implementation rules and procedures, identification of possible UA projects, and awareness-raising initiatives for women. As it turned out, the actual achievements of rural and outer island network rollouts by the two operators, and resulting improvements in access to networks and services had greatly exceeded expectations by the project's closing date. Further, UA as such was not part of the project's PDO or results framework except for an intermediate indicator on the preparation of UA objectives and strategy (policy).

47. **Establishment of efficient and well-regulated competition:** The rating for achievement of this part of the PDO is Satisfactory. Three PDO indicators are related to this outcome: (a) Improved ICT policy environment, (b) Legal and regulatory framework more effective at delivering sector performance, and (c) Increase in the level of competition in the ICT sector. In addition, the attainment of this outcome is supported by the achievements of five intermediate indicators: the establishment of TCSI, completion of a spectrum management plan, completion of a numbering plan, establishment of an interconnection regime, and award of other telecom licenses.

¹⁸ Internet prices have declined due 3G technologies that were introduced in 2011 that now provide an upload speed of up to 5 megabits per second (mbps), and retail prices continued to drop as a result of fierce competition between STL and Bemobile/Vodafone. According to TCSI, many businesses now subscribe for mobile data plans via USB modems/dongles, rather than fixed-ADSL connections. Fixed broadband penetration remains low at around 1.8 percent of households (Telegeography).

¹⁹ This is for a capped plan of up to 1G and costs for extra usage is \$0.05per megabyte (MB). Nonetheless, price of Internet services remain high compared to countries including, for example, Tonga (\$31.54/month for 2Mbps download) and Samoa (\$43/month for 3Mbps download).

²⁰ GSM (Global System for Mobile communication) is a digital mobile telephony system that is widely used in Europe and other parts of the world. GSM uses a variation of time division multiple access (TDMA) and is the most widely used of the three digital wireless telephony technologies (TDMA, GSM, and CDMA).

48. The public and private sector interlocutors consulted for this ICR were unanimous in their view that the Project's establishment and sustaining of the TCSI and its robustness in terms of skills, knowledge and tools necessary to regulate the sector, was crucial in bringing competition and stability to the telecom market in Solomon Islands, and that this in turn was instrumental in achieving the coverage and affordability gains discussed above. The representatives of sector organizations cited especially: (a) TCSI's sound technical capacity, which has enabled it to serve as a resource for practical advice and to informally resolve issues without resorting to heavy-handed action and (b) TCSI's independence from political or other interest group influence, which has earned it credibility as a guarantor of fair practices.

49. Outcomes of the relevant PDO indicators are:

- (a) **Improved ICT policy environment was partially achieved.** The draft policy was prepared but the capacity of the government to absorb and apply it remains weak and limited. MCA has not been able to recruit suitably qualified individuals for the ICT Director and ICT Deputy Director positions, though the positions were advertised over three times. Even so, TCSI established itself as a credible *de facto* promoter of the key policies underpinning the Telecoms Act (see paragraph 50).
- (b) **Legal and regulatory framework more effective at delivering sector performance was achieved** through TCSI's actions during the period of the Project (see paragraph 50).
- (c) **Increase in the level of competition in the ICT sector was achieved.** The regulatory environment evolved with TCSI's efforts in the establishment of interconnection, tariff, and licensing regimes that are conducive to competition. Competition between STL and Bemobile remains fierce, with both operators aggressively rolling out infrastructure and improving their services. Bemobile reached a 40.8 percent market share in just four years, and STL greatly improved its coverage and services and reclaimed market share from 57.6 percent in 2013 to 59.2 percent in 2014.²¹ In addition, there are now several active internet service providers, including Satsol, Pointcruz, and Smile.

50. Project outputs include the following:

- (a) The ICT policy advisor employed under the Project provided technical assistance to MCA. The drafts of the National ICT policy and the Broadcasting Policy were presented to the Prime Minister for endorsement in June 2015, before submission is made to the Parliament for approval.
- (b) TCSI's regulatory activities that contributed to the specific outcomes (see paragraph 49) during the Project's implementation included the following. Details of the outputs are in Annex 2.
 - (i) Enforcement of operator obligations: In 2010-2011, TCSI acted in response to Bemobile's failure to achieve the targets set under its license. The operators' radio frequency use is being enforced using the radio signal monitoring equipment procured and training provided under the Project.
 - (ii) Monitoring of anti-competitive behavior. TCSI maintained close surveillance of operator advertising practices and pricing behavior, and intervened where required.
 - (iii) Management of licensing: TCSI gazetted the introduction of the Class License in September 2011, which opened the sector to multiple operators deploying different technologies (e.g. WiMAX). This has significantly increased options for consumers to access Internet services.

²¹ Telegeography, GlobalComms Database

- (iv) Management of spectrum. As mentioned above, TCSI assigned the remaining GSM spectrum to STL and Bemobile. In addition, a detailed Spectrum Management plan was completed in 2015.
- (v) A business monitor intelligence database and radio spectrum management software were procured and implemented under the Project, and are being used effectively by TCSI staff.
- (vi) Local TCSI staff received significant training in their respective functions, including participation in regional conferences.
- (vii) Raising consumer awareness—e.g. TCSI issued press releases alerting consumers to text scams.

3.3 Efficiency

Rating: Substantial

51. The project's appraisal did not include an analysis of the economic or financial rate of return. The economic/financial analysis at appraisal consisted entirely of an assessment of the financial sustainability of TCSI, because the bulk of project financing was for TCSI's operating costs. The assessment concluded that TCSI would have sufficient budget, from annual service license fees among others, to cover its operational costs from 2015 onwards. The Project closed without extensions and remained within the original budget envelope (99 percent disbursed). There were shortcomings in terms of: (a) slow progress and the partial achievement of component 1 (policy) compared to appraisal targets, and (b) the nonimplementation of component 3 (UA), but the financial amounts allocated for these components were minor and thus did not derail the project from achieving its overall development objectives. A simple benchmarking of TCSI's operating costs against a comparator agency was carried out to assess the project's cost efficiency, as detailed in Annex 3.

52. It should be noted that high economic and social benefits from increased telecommunications coverage and reduced costs should be expected in a highly dispersed island economy like Solomon Islands. Even with a large margin of error, the costs of the project appear negligible compared to the broad economic and social benefits achieved through liberalization and increased competition, including the additional tax revenues for SIG generated from the sector. Finally, it is reasonable to estimate that the communications sector directly contributed between 2.3 percent and 3.3 percent to real GDP growth between 2008 and 2012.²²

3.4 Justification of Overall Outcome Rating

Rating: Satisfactory

53. The Project's substantial achievement of its objectives of providing increased access to reliable and affordable telecommunications services for the majority of the population and the establishment of efficient and well-regulated competition, its high continued relevance to economic and social development of Solomon Islands, and its substantial cost efficiency merit an overall Satisfactory rating for Outcomes.

3.5 Overarching Themes, Other Outcomes and Impacts

54. Poverty Impacts, Gender Aspects, and Social Development: The project significantly enabled the increased coverage and affordability of telecommunications services in rural and remote outer islands, where over 78 percent of the population resides. The total population coverage increased dramatically

²² Solomon Islands ICT Economic and Social Impact, PRIF, May 2015

from just over 10 percent in 2009 to an estimated 89 percent today. TSCI estimates that 40 percent of the active mobile users and 27 percent of the total population now have the option to choose between STL and Bemobile, which continue to compete to lower pricing for end users. The improved voice access is helping the people in remote islands overcome isolation, enhance economic activity, and promote social integration with the rest of the country. In particular, the stable regulatory environment allowed the introduction of mobile banking in 2013 by three major trading Banks (ANZ, BSP), on mobile operators' networks, enabling financial inclusion of the previously unbanked. It is estimated that there are now around 24,500 mobile banking users, including 15,500 previously unbanked, reaching people in all nine provinces across the country.²³ According to RAMSI's people survey 2013, 57 percent out of over 800 women who were surveyed in Guadalcanal, Malaita, and Western islands owned a mobile phone, which was the same as the percentage for men.

55. Institutional Change/Strengthening (*particularly with reference to impacts on longer-term capacity and institutional development*)

56. The Project improved the institutional capacity of TCSI to regulate the transitioning sector. In addition to the several consultancy assignments (legal advisory services, implementation of business intelligence database), there was significant knowledge transfer from the two international Commissioners to the local professional staff throughout the Project. This helped to enhance technical capabilities of TCSI staff in areas including licensing, spectrum management, quality of service monitoring and regulatory compliance, among others. Significant training was also provided to TCSI staff, such as the implementation of the business monitor intelligence database, radio spectrum management, and financial management systems. Other capacity-building activities for TCSI staff included participation in training facilitated by the International Telecommunications Union (ITU) and the Asia-Pacific Telecommunity (e.g. disaster management communications, internet technology, internet services investigation and security, ICT statistics, and wireless access technology); trainings on economics and policy, broadcasting, ICT policies, investigation processes, internet of things, regulatory and market intelligence. Attendance at regional and international conferences also assisted in developing networking opportunities with other telecom regulators.

57. Overall, as a result of the regulatory strengthening component, TCSI has effectively developed the capacity to regulate Solomon Island's telecommunications sector, providing certainty for the operators to continue to make large investments to provide telecommunications infrastructure and services, even in some of the most remote islands. The ICT policy advisor hired under the Project took significant steps to assist MCA in building a foundation for ICT policy development, though institutional development in this area was not achieved due to a significant lack of counterparts.

58. Other Unintended Outcomes and Impacts (positive or negative): Not applicable.

4. ASSESSMENT OF RISK TO DEVELOPMENT OUTCOME

Rating: Moderate

59. The risk that development outcomes will not be sustained and the risks to the overall institutional framework for sustaining the achievements are Moderate. The possible risks for the project are: (a) TCSI is not fully financed from license fees; (b) turnover of the Commissioner and technical staff could result

²³ <https://bluenotes.anz.com/posts/2015/02/banking-the-unbanked-in-the-solomon-islands/>

in either positive or negative outcomes on TCSI's institutional capabilities; (c) SIG lacks the commitment to fully exercise its oversight function to ensure technical and financial sustainability of TCSI; and (d) the draft ICT policy is rejected by the SIG, resulting in fragmentation of government leadership on ICTs, which would hinder some priority follow-up work, for example the establishment of a Chief Information Office to oversee sector affairs and practices, instituting initial work on cyber security, fostering ICT literacy and skills, and consumer protection, among others, which are highly linked to the establishment of the submarine cable as detailed in section 2.2.

60. The likelihood of (a) TCSI is not fully financed from license fees, is Low but the consequence is considered Moderate. At the end of the Project, TCSI undertook a financial assessment (attached in the Notice of Funding Deficit) calculating its projected license fee revenue—that is set at maximum 2 percent of industry revenues—against its expected operating costs for the next four quarters. This confirmed that it should be able to fully self-finance from sector fees.

61. The likelihood of (b) turnover of Commissioner and technical staff, resulting in either positive or negative outcomes on TCSI's institutional capabilities, is Low but the consequence is considered Moderate. To mitigate this risk, TCSI has invested significantly in building leadership capacity of its local staff. In addition, SIG renewed the current Commissioner's contract for another two years at the end of 2014 to ensure continuity in the medium term. Nonetheless, the risk remains if qualified and experienced staff is not retained in TCSI to efficiently regulate and maintain healthy competition in the dynamic market.

62. The likelihood of (c) SIG lacks the commitment to fully exercise its oversight function to ensure technical and financial sustainability of TCSI, is considered Substantial and consequence Moderate. This is given the overall weak capacity of SIG and uncertainties surrounding the effectiveness of the Evaluation Committee that is responsible for maintaining financial and administrative oversight of TCSI. Nonetheless, given that there will no longer be fiduciary oversight provided by the Bank as part of the project supervision, the government will have no choice but to step up and grow into the role.

63. The likelihood and consequence of (d) the draft ICT policy is rejected by the SIG, resulting in fragmentation of government leadership on ICTs, are considered Moderate. Key Government officials, with continued support from TCSI, are carefully taking steps to raise awareness in the executive and legislative branches of the importance of adopting the national ICT policy and establishing an appropriate governance structure for ICT development, which will be particularly significant in the coming years as the planned submarine cable promises to dramatically increase both demand and supply of ICT services.

5. ASSESSMENT OF BANK AND BORROWER PERFORMANCE

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Rating: Satisfactory

64. Bank performance at entry is rated Satisfactory. The Bank team was well experienced and knowledgeable, applying successful international best practices to local conditions. SIG was committed to the overall sector reforms, and the Bank team had been providing sound advice and assistance in the process since 2004. Preparatory activities were carried out in conjunction with the cofinancier, then AusAID, whose objectives were well integrated into the design of the project. Complementary funding by RAMSI and Australia were effectively mobilized to undertake preparatory activities, and was particularly helpful in starting up the operations of TCSI prior to Project approval.

65. The project design was creative, in that it took advantage of the unique circumstances at the time—recent enactment of the Telecoms Act; creation of the new Regulator; launch of a new competitive market; need for special financing arrangements due to the Settlement Agreement with STL—to provide just-in-time support for TCSI’s crucial functions. The choice of an investment instrument was driven by a consensus between the Government, the Bank, and then AusAID that continued, sustained engagement was essential—in the context of weak capacity and political fragility—to consolidate the important gains of the 2004-2010 technical assistance and to take the sector’s performance to the “next level”.

66. The fact that the project primarily financed TCSI’s operating costs intrinsically posed challenges of attribution of the project’s stated objectives, as discussed above. However, alternative project designs would have presented their own similar difficulties. One option might have been to find alternate funding in 2009 to pay off the obligations to STL,²⁴ thus avoiding the need for filling the financing gap in TCSI’s revenue stream and making it possible to design an investment project that only funded technical assistance and equipment for institution-building and capacity development. Although this approach might have helped to avoid some of the headaches that later arose concerning the financing of operating costs, it would not have addressed the attribution problem in relation to the same very broad PDO. Another way of addressing attribution might have been to use a much more modest set of project outcomes, perhaps centered on specific institutional development gains as opposed to sector-wide performance improvements. Still, it is also quite difficult to attribute institutional capacity-building gains to technical assistance, as experience shows. More importantly, however, at the time of project preparation, it was considered of prime importance to signal, through the project’s results framework, the expectations of the citizenry, the Government and international community of the new liberalized sector and regulatory regime.

(b) Quality of Supervision

Rating: Moderately Satisfactory

67. Bank supervision is rated Moderately Satisfactory. Implementation review/supervision missions took place on a regular basis, totaling six full missions from effectiveness to Project closing.²⁵ Comprehensive Aide Memoires and Management letters were sent after each mission. These provided substantive guidance on sector issues, the implementation of project-funded activities, and the resolution of problems. A formal midterm review was deemed unnecessary given the simplicity of the project and its basically good performance at the mid-point. Even so, the frequency of formal missions was less than ideal in a limited capacity environment such as Solomon Islands, despite three informal technical missions by the Bank’s legal and regulatory specialist in 2011-2012. Eight FM review missions were conducted, which was in accordance with the risk mitigation measures set forth at Project appraisal. The two instances of ineligible expenditures created some tensions in the relation between the Bank team and TCSI. In the latter period of the project, these distracted the attention of the Bank’s task team and management away from more substantive matters. There was no supervision mission between July 2014 and the project’s closing on March 31, 2015, nor was a final Implementation Status Report (ISR) prepared after July 2014. With regards to the UA component, records show that the Bank team did proactively attempt to engage TCSI on the issue, including advice on possible adjustments to the scope.

²⁴ A Bank-financed DPO might have been considered for this, but it is doubtful that the conditions at the time would have made this workable.

²⁵ February 2011, December 2011, October 2012, April 2013, October 2013, July 2014.

Nevertheless, the two project restructurings were not used as opportunities to revise the results framework to reflect the current realities of the sector.

(c) Justification of Rating for Overall Bank Performance

Rating: Moderately Satisfactory

68. The overall rating of the Bank's performance is Moderately Satisfactory, reflecting the two dimensions: quality at entry and supervision/implementation support. Significant expert resources on policy and regulatory matters were invested for the preparation and supervision of the project. The Bank's direct engagement on the project's own technical and policy matters tapered off towards the end of the project (except for some work on a possible follow-on e-government project which did not materialize).

Borrower Performance

(a) Government Performance

Rating: Moderately Unsatisfactory

69. Government performance is rated Moderately Unsatisfactory. Despite initial commitments, MCA's lack of counterpart staff and weak engagement contributed to significant shortcomings in achieving the expected results of the policy component of the Project. The draft ICT and broadcasting policies prepared with the Project's technical assistance received very limited levels of uptake by senior government officials, and ICT policy coordination within Solomon Islands remains fragmented between TCSI, MoFT, and MCA and lacks coherence. In addition, the Project lacked government oversight of the activities carried out by the implementing entity, TCSI. The interdepartmental monitoring committee (the "Consultative Group") which was to be established before December 2010, in accordance with Project's Financing Agreement, was not established until mid-2012, and its role remained ambiguous throughout the remainder of the Project.

(b) Implementing Agency or Agencies Performance

Rating: Moderately Satisfactory

70. TCSI was responsible for the execution of Component 2, as well as project management, monitoring and evaluation, and reporting to the Government and the World Bank. A total of nine bi-annual project reports were submitted to the World Bank. During the course of implementation, TCSI took initiatives not only within its own mandate, but was also proactive in its capacity as the PIU to assist MCA with implementing the policy component. TCSI's focus on capacity building was apparent, as staff often participated in training activities to enhance their skills in carrying out their respective functions. Despite a few turnovers, TCSI was able to maintain technically competent and qualified staff within the Project Implementation Unit over the project period, which contributed to achieving the development results.

71. Despite the positive outcomes of the project, there were two instances of ineligible expenditures, though eventually resolved as described in section 2.4. These lapses demonstrated a certain lack of good judgment by TCSI. In addition, the extreme position taken by TCSI that its independent status should place it beyond normal fiduciary accountability led to the expenditure of significant amounts of unproductive time and effort by TCSI and the Bank to resolve the issues. Such time and effort could have been spent much more gainfully on substantive matters.

72. The disagreements over the ineligible expenditures exacerbated tensions between TCSI and the Bank that already had arisen due to TCSI's resistance to technical advice from the Bank (also on the grounds of TCSI's independence). An example of this relates to the UA component. Available records

indicate that the Bank team had advised TCSI to prepare terms of reference to consult with the industry and subject matter experts on appropriate strategies for ensuring equitable access to ICT, particularly Internet, to ensure some of the work could be implemented as part of the project. TCSI rejected even these modest suggestions.

73. Another comment mentioned by various stakeholders interviewed for the ICR was that TCSI could have done more in the area of public outreach.

74. Despite these limitations, on balance TCSI's overall performance is rated Moderately Satisfactory, considering its commitment to achieving the project's objectives, its technically sound relations with major public and private sector stakeholders, and its satisfactory handling of M&E. These factors significantly outweighed TCSI's shortcomings in financial management.

(c) Justification of Rating for Overall Borrower Performance

Rating: Moderately Satisfactory

75. Overall Borrower Performance is Moderately Satisfactory. Although the government's performance was Moderately Unsatisfactory, the positive outcomes of the project which achieved or surpassed most of the results indicators, and TCSI's Moderately Satisfactory performance as the implementing entity, justify the overall rating of Moderately Satisfactory.

6. LESSONS LEARNED

76. The World Bank's team had engaged with SIG throughout the liberalization process, and consisted of technical staff that were experienced in similar projects internationally as well as within the region. This enabled the team to provide sound and tailored advice to SIG throughout the preparation process. In addition project preparation was adequately sequenced. SIG and the Bank team ensured that the Commissioner's position was filled before project approval. This enabled the timely establishment of TCSI (including office setups and recruitment of national staff), and smooth implementation once the project became effective.

77. That said, the results of the policy component demonstrate that minimum professional counterparts must be in place before effectiveness to launch activities and avoid later inefficiencies. For example, Project preparation could have included the provision to assist MCA in recruiting adequate staff—potentially international to assist in the short- to medium-term given the limited availability of talent in-country—within its ICT policy unit. This would have led to building momentum from the start, and a better sense of ownership of the component by MCA. Advanced preparation of the terms of reference for the Consultative Group may have also minimized the delays surrounding its setup and functions.

78. A formal midterm review did not take place, given the simplicity of the project and its basically good performance at mid-point. However, in retrospect, it might have been useful to organize an event at a later stage, possibly in the form of a workshop, to engage high-level officials and subject matter experts to assist in the identification of ways to advance the policy component or the UA component.

79. Factors which contributed to the success of the regulatory component of the project are summarized as follows:

- (a) The project acknowledged and appropriately addressed the realistic challenges of recruiting technical and managerial skills for TCSI. A skilled and experienced Commissioner was recruited

internationally prior to project approval, whose initial focus was on recruiting qualified national staff.

- (b) TCSI was able to develop its own human resource, including remuneration policies, which allowed TCSI to retain qualified staff with specific technical skills. This is a success considering the need to compete for thinly available talent within Solomon Islands.
- (c) Adequate emphasis was placed on training and capacity building. This included technical training, and participations in international and regional meetings. As a result, TCSI was effectively able to monitor the market and provide appropriate technical advice to the operators, where needed.

80. Finally, skilled staff within the Project Implementation Unit is one key for satisfactory project implementation. Over the project period, the Commissioner changed once and the project coordinator changed twice, but there was overall continuity of qualified staff working on the project. However, in light of the project's design that puts such high amount of funds into IOC, a more upfront and documented discussion with the implementing agency as to what is eligible under IOC, may have avoided the two instances of ineligible expenditures which required significant time and effort to resolve during the latter half of the project.

7. COMMENTS ON ISSUES RAISED BY BORROWER/IMPLEMENTING AGENCIES/PARTNERS

(a) Borrower/implementing agencies

81. Comments received from MoFT were minor and have been incorporated in the ICR. In its evaluation report/letter dated September 17, 2015 (Annex 7), MoFT provided update on the current status of the "Notice of Funding Deficit," which is detailed in section 2.5. This information is incorporated in the ICR.

(b) Cofinanciers

82. AusAID (now DFAT), in response to the Bank's draft ICR, commented that the Moderately Unsatisfactory performance of the government during implementation should be reflected in the Risks to Development Outcomes, specifically: (c) SIG lacks the commitment to fully exercise its oversight function to ensure technical and financial sustainability of TCSI; and (d) the draft ICT policy is rejected by the SIG, resulting in fragmentation of government leadership on ICTs, higher than 'moderate'. The likelihood of (c) has been revised to 'substantial.' The rating of (d) as moderate has been retained given the efforts seen in raising awareness of the national ICT policy, and TCSI's commitment to continue to provide administrative support to SIG to move the adoption forward.

83. Other comments received were minor and/or editorial and are (also) incorporated in the ICR.

(c) Other partners and stakeholders

(e.g. NGOs/private sector/civil society)

84. Not applicable.

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
2. Sector Policy Support	0.30	0.30	100
3. Regulatory Support	4.96	5.4	108.4
4. Technical assistance for UA	0.30	0	0
5. Project Management	0.39	.17	42.5
Total Baseline Cost	5.95	5.87	98.59
Physical Contingencies	0	0	0
Price Contingencies	0	0	0
Total Project Costs	0.00	0.00	
Front-end fee PPF	0.00	0.00	.00
Front-end fee IBRD	0.00	0.00	.00
Total Financing Required	0.00	0.00	

(b) Financing

Source of Funds	Appraisal Estimate (USD millions)	Actual/Latest Estimate Disbursements (USD millions)	Percentage of Appraisal
Borrower	0.00	0.00	0.00
IDA Grant	3.25	3.24	99.0
Pacific Regional Infrastructure Facility Trust Fund (TF97221)	2.74	2.68	98.0
	Other	Actual	Percentage Expensed
Pacific Regional Infrastructure Facility Trust Fund (TF96582)	3.0	3.0	100

Annex 2. Outputs by Component

Appraisal Plans		Actual Accomplishments at the Time of ICR and Reasons for Deviation
Component 1: Sector Policy Support		
A	Reviewing and updating of the telecommunications and ICT policy.	The project recruited an ICT policy advisor in late 2012 to assist MCA. In June 2015, the draft National ICT and Broadcast Policies were submitted to the Prime Minister for consideration and possible endorsement to submit to Parliament for its consideration.
B	Development of governance arrangements for scarce resources and policy approaches toward wider access and use;	Proposed governance arrangements to establish a Chief National Information Office under the Prime Minister's Office was included as part of the draft National ICT Policy.
C	Making adjustments, as appropriate to the broader ICT legal and regulatory framework, and any fiscal incentives that may be relevant to the environment. This will include a needs assessment for secondary legislation.	An initial gaps analysis on enabling laws (e.g. cyber-security) that would be essential for new broadband enabled ICT development was undertaken by the Bank team in conjunction with the Attorney General's office. This fed into the draft national ICT policy prepared under component 1.
D	Supporting the Government's work on international agreements related to telecommunications, including possible regional connectivity programs;	The Solomons Oceanic Cable Company (SOCC) was established in 2011 with equity participation from STL and the National Provident Fund, and has sought financing from ADB and commercial banks for a submarine fibre-optic cable from Solomon Islands to Sydney, plus two spurs to connect Gizo in Western Province and Auki in Malaita province. After initial delays, it is estimated that the cable could be ready for service by end 2016 or early 2017. In the interim, STL signed an agreement with O3B Networks, a medium-earth orbit satellite provider, and services became live in April 2015. ²⁶
E	Participation in international agreements related to telecommunications (International Telecommunications Union, submission of World Trade Organization commitments).	Solomon Islands is a member of the International Telecommunications Union, and regularly attends study groups and conferences on standardizations, and ICT statistics. According to the WTO website, the General Agreement on Trade in Services - Schedule of Specific Commitments for Solomon Islands has not been modified since April 1996.
Component 2: Regulatory Support		
A	The recruitment and operations of a telecommunications commissioner and other relevant staff as agreed with the Association	Completed. There are 6 staff, the Commissioner, 4 professional staff (Finance Manager, Director Market Competition, Regulatory Resources and Manager Spectrum) and a receptionist/cleaner.
B	Provision of technical assistance for the development of a regulatory regime including all necessary regulatory instruments, structures, tools, capabilities and governance. These include:	

²⁶ <https://www.telegeography.com/products/commsupdate/articles/2015/04/17/our-telekom-now-live-on-o3bs-network/>

	Issuance of telecommunications service and radio spectrum licenses and other authorizations, and monitoring compliance with licenses and regulations;	Issuance of telecom service and radio spectrum licenses and other authorizations, and monitoring of compliances are being completed as part of the day to day operations of TCSI as stipulated in their Annual Reports 2011-2014 (draft). Radio frequency use is being enforced by TCSI using its radio signal monitoring equipment procured and training provided under the Project.
	Planning, allocation, and management of radio spectrum (including broadcast), telecommunications numbers, and Internet domain names;	Spectrum allocations are being managed adequately by TCSI. All GSM spectrum have been allocated to STL and Bemobile, and radio spectrum licenses are issued upon application. TCSI undertook an initial National Spectrum Band Plan consultation process in April 2011, and a detailed Spectrum Management plan was completed in 2015. In March 2013, TCSI issued STL with an additional seven-digit GSM number range for use in 'Honiara and other Provinces' and the 'Western Province.' ²⁷ Discussions on Internet domain name managements are ongoing with STL. TCSI will be undertaking exercises for Internet domain name modeling.
	Technical regulation including interconnection, radio apparatus, and telecommunications equipment;	TCSI supported the following: Interconnection agreements between STL and Bemobile had been signed in April 2010. Class Licenses were introduced in September 2011, which allows operators/ISPs to provide local or international telecoms services, without the use of radiofrequency spectrum. Consultations on possibilities for infrastructure sharing have commenced between STL and Bemobile.
	Monitoring competitive behavior including resolving disputes between operators and protection of users; arbitration and mediation services, as required; and	TCSI maintained close surveillance of any anti-competitive behavior. In 2013, TCSI facilitated resolution of a conflict situation between STL and Bemobile over signage rights. Between 2013 and 2014 complaints about anti-competitive behavior by STL in providing top-up services for pre-paid phones were resolved—TCSI provided legal training to STL. In 2014, TCSI facilitated a resolution for a formal complaint about possible anticompetitive conduct in advertisements in the International airport. In terms of consumer protection, TCSI issued a press release via TV/radio in 2014, alerting consumers of severe text scams.
	Related regulatory matters including emerging needs linked to changes in the industry, market, technologies and international best practices.	In 2013, TCSI closely oversaw the changes in ownership of Bemobile's parent company and subsequent management arrangements with Vodafone in 2013. In terms of technologies and international best practices, roadmap for the transition from Analogue to Digital Terrestrial Television Broadcasting in Solomon Islands was completed with assistance from ITU, and the National Spectrum Band Plan currently under preparation will bring Solomon Islands into line with ITU regional regulations.
C	Provision of equipment including computers, and specialized software for spectrum management and monitoring	Completed. TCSI purchased the SMS4DC software for spectrum management and monitoring and two TCSI engineers received training.

²⁷ Telegeography, GlobalComms Database

D	Provision of training and overseas development visits for the benefit of staff of the Telecommunications Commission	TCSI staff regularly attended local, online and overseas training and conferences. These include: Certified Management Institute Professional Certificate in ICT-Assisted Development; Expert software training for radio-spectrum management; and for TCSI's financial management system; Participation in trainings facilitated by ITU and the AP Telecommunity (e.g. disaster management communications, internet technology training, internet services investigation and security, ICT statistics, and wireless access technology); Trainings on economics and policy, broadcasting, ICT policies, investigation processes, internet of things, regulatory and market intelligence; Attendance of regional and international conferences.
E	Provision of operations support, including Provision of operational support including recurrent costs	Completed.
Component 3: Technical Assistance for Universal Access		
A	Development of a universal access policy, including stakeholder consultations	There was no output for this component. It was envisaged that this component will be implemented once the mobile network rollout plans are nearing completion, so as not to crowd out private investment. During the latter half of the project, TCSI assessed that development of the local market has been satisfactory including in rural areas, and there is no further demand for exploring a UA policy. As at this ICR, TCSI's position remains the same.
B	Development of the necessary regulatory instruments, instructions and practical procedures to implement the provisions of the Telecommunications Law in relation to universal access, including procedures for the establishment and operations of a universal access fund	
C	Identification, analysis and design of possible universal access sub-projects	
D	Design and implementation of awareness-raising and training programs for women on the use of telecommunications and ICT to improve livelihoods	No output.
Part 4: Project Management		
A	Provision of support for the implementation of the Project, including management support, operating costs, monitoring and evaluation activities, audits, and fiduciary functions of the Project Management Unit	Completed.

Annex 3. Economic and Financial Analysis

To assess the project's cost efficiency, the ICR has attempted to conduct a simple benchmarking of TCSI's operating costs compared to a similar agency in a comparator country. Vanuatu was chosen given the two countries' relative similarities in geographic and demographic contexts and mobile penetration rates (Vanuatu 60 percent vs. Solomon Islands 66 percent; see table below). According to the published annual reports of the Telecommunications and Radiocommunications Regulator of Vanuatu (TRR) - established in 2009, an equivalent to around US\$6.64 million ²⁸ were spent on operating costs from 2010 to 2014. This makes the cost per capita (population) to around \$26 over five years. In comparison, around \$5.7 million of the project's financing were spent on TCSI's operating costs, which makes the per capita expenditure around \$10 over a five year period. This admittedly limited and simple comparison supports a judgement that the bulk of the project's expenditures were cost-effective (independent of other considerations such as the size and nature of the two economies, the maturity levels of the sectors, or inputs and outputs of the two institutions).

	Telecommunications and Radiocommunications Regulator of Vanuatu (TRR)	Telecommunications Commission of Solomon Islands (TCSI)
Five-year operating cost	\$6,640,000 (approx.)	\$5,700,000 (approx.)
Population (2013)	252, 763	561, 231
Cost per capita	\$26	\$10

Source: World Bank Indicators, TRR website (<http://www.trr.vu/>)

²⁸ Operating expenses recorded in Vanuatu Vatu (VUV): 2014 VUV\$ 208,195,067, 2013 VUV\$ 167,195,666, 2012 VUV\$ 163,061,971 2011 VUV\$ 139,190,657, and 2010 VUV\$ 68,062,550. Exchange rate US\$0.0089 = VUV\$1, September 2015.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members (by alpha surname)

Names	Title	Unit
<i>Lending</i>		
Natasha Beschorner	Senior ICT Policy Specialist (TTL)	CITPO
Sheila Braka Musiime	Senior Counsel	LEGES
Charles Feinstein	Sustainable Development Leader	EACNS
Doyle Gallegos	Lead Telecommunications Specialist	CITPO
Naomi Halewood	Operations Analyst	CITPO
John Haydon	Senior Regulatory Specialist (cons)	CITPO
Stephen Hartung	Financial Management Specialist	EAPFM
Robert O’Leary	Senior Finance Officer	CTRFC
Thao Le Nguyen	Senior Finance Officer	CTRFC
Andrea Ruiz-Esparza	Senior Program Assistant	CITPO
Evelyn Villatoro	Senior Procurement Specialist	EAPPR
<i>Supervision/Implementation Support</i>		
Natasha Beschorner	Senior ICT Policy Specialist (TTL)	GTIDR
Alan G. Carroll	Operations Advisor	GTIDR
Sebastian Foo	e-Government Specialist (consultant)	GTIDR
Stephen Paul Hartung	Financial Management Specialist	GGODR
Robert Jauncy	Senior Country Officer	N/A
Annette Leith	Operations Officer	EACNF
Isabella Micali Drossos	Senior Counsel	LEG
Marjorie Mpundu	Senior Counsel	LEGES
James L. Neumann	Senior Counsel	GTIDR
Cristiano Costa e Silva Nunes	Senior Procurement Specialist	GGODR
Andrea Ruiz-Esparza	Senior Program Assistant	CITPO
David Satola	Senior Counsel	LEGPS
Jinan Shi	Senior Procurement Specialist	GGODR
Josefo Tuyor	Safeguards Specialist	OPSOR
<i>ICR</i>		
Alan G. Carroll	Co-author	GTIDR
Junko Narimatsu	ICT Policy Specialist/ICR TTL	GTIDR
Andrea Ruiz-Esparza	Senior Program Assistant	GTIDR

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of Staff Weeks/(\$)	Cost (including travel and consultant costs)
Lending		
Total:	16 SW (\$49,868)	LEN: \$78,460
Supervision/ICR	38.2 SW (\$245,048)	SPN/ICR: \$224,200
Total:	54.2 SW (\$245,048)	\$302,660

Annex 5. Beneficiary Survey Results

A beneficiary survey was not required for this project.

Annex 6. Stakeholder Workshop Report and Results

No stakeholder workshop was undertaken.

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR



SOLOMON ISLANDS GOVERNMENT
Ministry of Finance and Treasury
P O Box 26
Honiara

Ref: 459/10/26

Date: 17th September 2015

Ms Anne Tully
The Country Representative
Solomon Islands
World Bank Group
Honiara

Dear Anne,

**SOLOMON ISLANDS TELECOMMUNICATIONS AND ICT DEVELOPMENT PROJECT
P113148: IDA H5550, TF096582, TF097221: Implementation Completion and Results Report:
Borrower's inputs**

For the purposes of the IDA's preparation of an ICR Report in respect of the above captioned project, this letter provides the Borrower's inputs.

1. With policy assistance from the IDA, liberalisation of the Solomon Islands Telecommunications Sector was effected in 2009, by means of a settlement agreement between the Solomon Islands Government and Solomon Telekom Company Ltd (STCL). This provided for the surrender of the company's exclusive telecommunications licence, and the agreement's terms were integrated with the provisions of a new statute, the Telecommunications Act 2009.
2. The Act conferred oversight of the sector, on market driven principles, under the New Regulator called the Telecommunications Commission. The Commission is a fully fledged independent authority funded by licence fees, with access to modern regulatory tools. In conjunction with the legislative reforms a competitive tender process was undertaken by the Solomon Islands Government whereby a new mobile network operator licence was issued to Bmobile Ltd, which commenced services in late 2010.
3. The subsequent need for donor funding in the implementation of the new regime, arose from the SIG's compensation obligation to Solomon Telekom of USD 10.8m. In addition, pending the entry of the new mobile network competitor and the collection of fees under the new licensing regime, the Commission required initial establishment funding. The Australian Department of Foreign Affairs (DFAT), formerly known as Australian Aid (AusAid), provided a grant of AUD 0.6m for the Commission's set-up, and DFAT and the IDA between them provided a further USD 8.9m towards the compensation.
4. Of this, USD 3.0m was directed to a rural fixed lines special compensation fund, and paid directly to Solomon Telekom by the Ministry of Finance and Treasury in annual instalments. However the remaining USD 5.9m was earmarked for indirect distribution to STCL.
5. For the first five years of the project, all Commission licence fee was diverted to pay off the compensation, and the Commission's recurrent costs were funded by the IDA grants. (The balance of the compensation is to be offset against the company's future sales tax liability). For the recurrent

costs the IDA fund pays for: policy support, support to the Telecommunications Commission; support for rural access to telecommunication services; and project management costs.

6. The liberalisation of the Sector has extended the interest of previous and current governments to explore improving connectivity access in telecommunication through a Fibre Optic Cable system. This is in consultation with the Asian Development Bank. Unfortunately, the installation of the new system has not yet commence before the closure of this project.
7. Generally, the Authorities are comfortable of the performance of the Telecommunications Commission in managing liberalization transition of the Sector from a monopoly to a competitive market environment. This also includes the establishment of the Telecommunication Commissioner's office.
8. On the other hand, the Authorities are aware that in some instances there has been strained relationship between the World Bank and the Telecommunications Commission. The Authorities worked closely with both institutions on resolving some these differences.
9. Going forward, Authorities are aware that a Notice of Deficit from the TCSI has been forwarded to Ministry of Finance and Treasury, the Accountant General's office. SIG is currently seeking legal advice from the Attorney General's Chambers.

The Solomon Islands Government thank the World Bank, its Directors and officers who have worked closely with the Solomon Islands Government Authorities to ensure that the government's objectives are met.

Yours sincerely,



McKinnie Dentana
For: Permanent Secretary
Ministry of Finance and Treasury

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

As mentioned in section 7 (b), comments provided by DFAT were mostly minor and/or editorial and were incorporated in the ICR.

Annex 9. List of Supporting Documents

Project Appraisal Document (March 4, 2010)

Financing Agreement (H550-SB)

Restructuring Papers (November 2013, March 2015)

Mission Aide-Memoires

Implementation Status and Results Reports

FM supervision reports

TCSI Project reports

TCSI Annual Reports

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