



# Technical Assistance Report

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Project Number: 43046  
Regional–Policy and Advisory Technical Assistance (R-PATA)  
November 2009

**Information and Communication Technology-Based  
Inclusive Growth and Poverty Reduction in the Pacific  
(Co-financed by the Republic of Korea e-Asia and Knowledge  
Partnership Fund)**

Asian Development Bank

## ABBREVIATIONS

ADB	– Asian Development Bank
DMC	– developing member country
ICT	– information and communication technology
PARD	– Pacific Department
SPC	– Secretariat of the Pacific Community
TA	– technical assistance

## TECHNICAL ASSISTANCE CLASSIFICATION

<b>Type</b>	– Regional–policy and advisory technical assistance (R-PATA)
<b>Targeting Classification</b>	– General intervention
<b>Sector (subsectors)</b>	– Transport, and information and communication technology (information and communication technology)
<b>Themes (subthemes)</b>	– <b>Economic growth</b> (promoting economic efficiency and enabling business environment, widening access to markets and economic opportunities), private sector development (public–private partnerships)
<b>Location impact</b>	– Rural (high impact), urban (medium impact), national (medium impact), regional (low impact)
<b>Partnership</b>	– Republic of Korea e-Asia and Knowledge Partnership Fund

## NOTE

In this report, "\$" refers to US dollars.

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## I. INTRODUCTION

1. The Secretariat of the Pacific Community (SPC) has been in consultation with the Asian Development Bank (ADB) to collaborate on a feasibility study of different information and communication technology (ICT) applications for Pacific developing member countries (DMCs), including regional infrastructure options. The proposed regional policy and advisory technical assistance (TA) for the study came out of a series of dialogues between ADB and SPC, as well as internal consultations among ADB's Office of Cofinancing Operations, Regional and Sustainable Development Department, and Pacific Department. The TA concept was reviewed by the Government of the Republic of Korea and accepted for financing by the Republic of Korea e-Asia and Knowledge Partnership Fund. The major agreements reached on the objectives, scope, implementation arrangements, and financing plan of the TA are reflected in this paper.<sup>1</sup> The TA design and monitoring framework is in Appendix 1.

## II. ISSUES

2. The rapid expansion of ICT and broadband infrastructure has increased efficiency and global productivity. ICT expansion has brought an increase in business and job opportunities, as well as greater outreach and delivery of education and other social services. As part of the Pacific Plan,<sup>2</sup> the Pacific Regional Digital Strategy fully recognizes the important role of ICT in regional development. A Pacific ICT Ministerial Forum meeting in March 2006 endorsed regional ICT priorities as (i) improving access to communication technologies through both cable and satellite technologies, (ii) reducing ICT costs, (iii) providing more bandwidth to the global ICT backbone technology, and (iv) strengthening ICT skills. These priorities were reconfirmed at the Pacific ICT Ministerial Forum (Connect the Unconnected) in February 2009.

3. Compared with the rest of the world, the Pacific has fallen behind in ICT infrastructure and application. The greatest concern in the Pacific is low-capacity and high-cost connections via satellite. Among the Pacific DMCs, only the Fiji Islands and Papua New Guinea have access to transpacific terrestrial cables. Satellite has been the main bandwidth provider since the 1970s, albeit at high prices that most people in the Pacific cannot afford. The situation will change soon as several private sector initiatives provide subregional connectivity.<sup>3</sup> In addition, some innovative experiments in the region have been able to demonstrate that ICT services can be made accessible even in remote rural areas and outer islands.<sup>4</sup> SPC requested ADB assistance for Pacific DMCs that are invited to join the South Pacific Islands Network Project in assessing different options for regional backbone network and in-country facilities. This will provide an opportunity for ADB and other development partners to consider infrastructure investment complementing private sector initiatives.

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<sup>1</sup> The TA first appeared in the business opportunities section of ADB's website on 17 July 2009.

<sup>2</sup> Pacific Islands Forum Secretariat. 2005. *The Pacific Plan*. Suva.

<sup>3</sup> The Northern Pacific Submarine Cable will connect the Marshall Islands and the Federated States of Micronesia to Guam with a fiber-optic cable in 2010. Proposed by a New Caledonia-based company, the South Pacific Islands Network will connect the South Pacific francophone countries (which are not ADB Pacific DMCs) and possibly include the Cook Islands, the Fiji Islands, Samoa, Tonga, and Vanuatu with submarine fiber-optic cable connections once these Pacific DMCs develop financing plans and business models by mid-2010. O3b Networks, aimed at connecting the "other 3 billion" people in the developing world through low-orbit satellite communications, will launch its service in late 2010. It has already formed partnerships in Africa to provide telecommunications operators and internet service providers with a low-cost, high-speed alternative to their 3G, WiMAX, and fixed-line networks to connect with the rest of the world.

<sup>4</sup> Examples include the Pacific Rural Internet Connectivity System supported by the Australian Agency for International Development, the Connecting Villages initiative using Nokia Siemens technology by the International Telecommunication Union, and the Pacific Telecentre Online Community.

4. The mere presence and availability of connectivity is not, however, sufficient to realize the full benefits of ICT. Education and health services can be improved, in terms of both access and quality, and business has expanded with the enhanced availability of ICT. It remains largely unknown, though, how the Pacific may more efficiently realize the benefits of ICT, especially in the pursuit of socially inclusive growth and poverty reduction.

5. In the Pacific, poverty or hardship is described as lack of access to (i) income-generating opportunities; and (ii) social services, especially primary education and health care.<sup>5</sup> ICT could directly generate income in only a few areas like call centers, considering the disadvantages of the Pacific DMCs stemming from geography and small populations. Indirectly, it could open up new opportunities through improved market information, which may create new jobs and markets. Savings in communication costs will contribute to the efficiency of Pacific DMC economies. Considering that many people in the Pacific rely on remittances, better communication services, possibly backed up by technological solutions such as mobile banking, will allow more secured transfers of remittances. There is significant potential for ICT to address the challenge of the 'tyranny of distance' in the Pacific and strengthen virtual connectivity.

6. More opportunities for the poor and people in remote areas lie in improved access to public services. Governments face great challenges in providing basic services to outer islands, and this can be dramatically improved through ICT. Especially, ICT-supported education can improve access to, and the quality of, education and prepare a workforce ready for the global economy. Disaster management is another area where ICT can contribute. In addition to an ICT-based early warning system, reliable communication is essential for fast, coordinated response. Demand for ICT in disaster management among Pacific DMCs is growing.

7. Affordability and sustainability are particular concerns for the Pacific. Experience in developing countries indicates that shared access successfully aggregates demand and shares cost. For communication services, this would be the solution. Cross subsidy and universal service obligation can be employed to expand coverage to unserved areas affordably. For other services such as education, health, and e-government, it is difficult to recover the cost from user fees. As governments are responsible for providing these services, governments should eventually cover their costs, with only marginal charges to users.

8. Such benefits can be realized only with strong stakeholder commitment and good programming of technological and human capacity and institutional resources. Since 2000, ADB's assistance for ICT in the Pacific has included (i) ICT readiness assessment and national ICT strategy; (ii) piloting ICT access point and service delivery in remote communities; and (iii) ICT applications for education, health, and financial management. Across all assistance, stakeholders' understanding of the benefits of ICT is identified as the key to ownership and success. The recent assessment of ADB's assistance in ICT highlights "the need for taking government-supported and demand-driven approaches for ICT projects" and "the demand and incentive structure of organizations and stakeholders," which concur with lessons from other organizations.<sup>6</sup>

9. A thorough analysis of increased access to ICT infrastructure will help maximize the benefits from it. The analysis should examine the types of ICT services that are capable of

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<sup>5</sup> ADB. 2002–2003. *Priorities of the People: Hardship in the Pacific Series*. Manila. The series include Fiji Islands, Marshall Islands, Federated States of Micronesia, Papua New Guinea, Samoa, Tonga, Tuvalu, and Vanuatu.

<sup>6</sup> ADB. Forthcoming. *Study on ADB's Assistance in Information and Communication Technology for Development*. Manila.

delivering tangible and sustained benefits. It will help stakeholders identify areas in which catalytic investment would ensure better utilization of the planned connectivity infrastructure in the interests of people currently unserved. It will inform discussions among governments, the private sector, and donors about demand and incentive structures to encourage more ICT use for inclusive growth and poverty reduction.

### III. THE TECHNICAL ASSISTANCE

10. The TA will enable SPC to better assist Pacific DMCs in assessing options for accessing regional connectivity infrastructure, making informed choices, and preparing investment proposals. The TA will explore appropriate and innovative ICT services and applications to help Pacific DMCs promote inclusive growth and poverty reduction.

#### A. Impact and Outcome

11. The TA impact is improved access of the poor and low income groups to ICT and extend its reach to remote areas. The TA outcome is the realization of investment in ICT applications and services for the poor and low income groups and in remote areas.

#### B. Methodology and Key Activities

12. This TA comprises two sets of outputs to be achieved through two phases over 12 months.

13. The first phase will (i) help selected Pacific DMCs develop financing plans and business models to enable their participation in the regional backbone initiative;<sup>7</sup> and (ii) conduct a thorough assessment of the existing and proposed ICT initiatives and applications to identify models and opportunities, constraints and gaps, and appropriate actions to identify how the people of the Pacific, especially the poor, disadvantaged, small and medium-size enterprises, and remote outer island and rural populations can benefit from ICT services. It will draw on international best practices and lessons from ADB and other partners' ICT interventions in general and account for the special conditions that affect ICT application in the Pacific. The particular needs of businesses and the potential to enhance the delivery of essential public services will be considered. Priority areas will be confirmed through consultations with Pacific DMCs and development partners. Relevant regulatory issues will be identified. Potential ICT interventions and useful resources identified through the assessment will be catalogued at the SPC website for wider dissemination. The results of the study will be disseminated through a regional workshop.

14. Based on the outcomes of the first phase, the second phase will assess possible ICT investments in selected Pacific DMCs. Institutional set-up and regulatory-reform needs will be assessed. A matrix of potential interventions will be developed, with three to five priority areas identified for in-depth consultation with partners and feasibility studies. The criteria for selection will include (i) the potential impact on growth and poverty reduction by reducing the cost of service access or use, (ii) proven demand, (iii) interest from governments and the private sector, and (iv) the ease of developing feasible models for public-private partnership or private sector

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<sup>7</sup> Cook Islands, Federated States of Micronesia, Marshall Islands, Solomon Islands and Tonga will be prioritized in the TA on the bases of opportunities from regional infrastructure development and existing initiatives. The selected Pacific DMCs have different regulatory environments that can inform the TA on different regulatory reform options.

initiatives. Subject to partner commitment, one to two priority areas will be further developed into investment projects.

### **C. Cost and Financing**

15. The cost of the TA is estimated at \$590,000 equivalent. The Pacific DMCs of SPC member countries have requested ADB to finance \$570,000 equivalent. The TA will be financed as a grant from the Republic of Korea e-Asia and Knowledge Partnership Fund and ADB. The SPC will finance the balance of \$20,000 equivalent through administrative and logistical support, staff time, and other in-kind contributions. Cost estimates and the financing plan are in Appendix 2.

### **D. Implementation Arrangements**

16. ADB will be the Executing Agency, and the Pacific Department will be the focal point for TA management. SPC will assume the role of Implementing Agency by hosting the consultant team in its new ICT unit and providing coordination support.

17. The TA will require 10.5 person-months of international consultancy (4.5 person-months for phase 1 and 6 person-months for phase 2), and 7 person-months of national consultancy (2 person-months for phase 1 and 5 person-months for phase 2). Individual consultants will be engaged in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time). The outline terms of reference for the consultants are in Appendix 3. All procurement of equipment will be done in accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time). An advance payment facility will be established to allow SPC to organize a regional workshop. Disbursements under the TA will be made in accordance with ADB's *Technical Assistance Disbursement Handbook*.<sup>8</sup>

## **IV. THE PRESIDENT'S DECISION**

18. The President, acting under the authority delegated by the Board, has approved (i) ADB administering a portion of technical assistance not exceeding the equivalent of \$500,000 to be financed on a grant basis by the Republic of Korea e-Asia and Knowledge Partnership Fund, and (ii) ADB providing the balance not exceeding the equivalent of \$70,000 on a grant basis for Information and Communication Technology-Based Inclusive Growth and Poverty Reduction in the Pacific, and hereby reports this action to the Board.

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<sup>8</sup> ADB. 2008. *Technical Assistance Disbursement Handbook*. Manila.

## DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b> Improved access to ICT among the poor and in remote areas</p>	<p>Availability of affordable ICT services in unserved areas in selected Pacific DMCs</p>	<p>Industry statistics and ministry reports</p>	<p><b>Assumptions</b> Governments' willingness to reform regulations as necessary for introducing new services and applications or new market players. Partners will buy into the concept of ICT for inclusive growth and poverty reduction.</p> <p><b>Risk</b> Skepticism on the use of ICT for poverty reduction among policy makers.</p>
<p><b>Outcome</b> Realization of investment in ICT applications and services for the poor and remote areas</p>	<p>At least one investment proposal is approved</p>	<p>TA progress report  Cofinancing commitment</p>	<p><b>Assumption</b> Government can create adequate and effective regulatory or financial incentives.</p> <p><b>Risk</b> No private sector interest in providing services for remote areas or for the poor.</p>
<p><b>Outputs Phase 1</b> 1.1. Financing plan and business models for different options of regional backbone network and in-country facilities in selected Pacific DMCs 1.2. Regional study of ICT interventions for inclusive growth and poverty reduction based on assessment report and stock-taking exercise 1.3. A catalogue of online resources in key areas of ICT intervention uploaded to</p>	<p>Quality outputs are delivered in timely manner. Quality criteria are based on partner or internal and external stakeholder feedback and acceptance</p>	<p>Time-lined work plan for outputs  Written feedback or comments from key partners and stakeholders</p>	<p><b>Assumption</b> In partnership with SPC, ADB can engage government, community, and private sector partners in consultations for meaningful feedback and to build up commitment.</p>

<b>Design Summary</b>	<b>Performance Targets/Indicators</b>	<b>Data Sources/Reporting Mechanisms</b>	<b>Assumptions and Risks</b>
<p>SPC website</p> <p>1.4. A regional workshop to share the study and build understanding and firm up commitments among partners</p> <p><b>Phase 2</b> Investment proposals for one to two ICT interventions for ADB and other partners</p>	<p>Three feasibility studies are completed within stipulated timeframe</p>	<p>Time-lined work plan for outputs</p> <p>Internal and external stakeholders' feedback</p>	
<p><b>Activities with Milestones</b></p> <p><b>Phase 1</b></p> <p>1.1. Financing plans and business models of options for regional backbone network and in-country facilities in selected Pacific DMCs.</p> <p>1.1.a. Recruitment of international consultant (3 weeks)</p> <p>1.1.b. Draft financing plan and business models for in-country consultation (2 weeks)</p> <p>1.1.c. In-country consultations and finalization of financing plans and business models with recommendations (3 weeks)</p> <p>1.2. Regional study of ICT interventions for inclusive growth and poverty reduction</p> <p>1.2.a. Recruitment of international consultant (3 weeks)</p> <p>1.2.b. Assessment of ADB ICT interventions and lessons for the Pacific, and stock taking of global best practices in ICT for inclusive growth and poverty reduction with implications for the Pacific (1 week)</p> <p>1.2.c. Field work assessing existing initiatives for possible replication, the institutional and regulatory environment, demand, and capacity of stakeholders (4 weeks)</p> <p>1.2.d. Regional study draft for internal review (2 weeks)</p> <p>1.2.e. Regional workshop presentation and feedback (2 weeks)</p> <p>1.2.f. Revision and finalization for publication (2 weeks)</p> <p>1.2.g. Final editing and printing (2 weeks)</p> <p>1.3. A catalogue of online resources in key areas of ICT intervention uploaded to SPC website</p> <p>1.3.a. Recruitment of national consultant (2 weeks)</p> <p>1.3.b. Agreement on the categorization of online resources for cataloguing in consultation with SPC (1 week)</p> <p>1.3.c. Collection and cataloguing online resources (3 weeks)</p> <p>1.3.d. Catalogue hosted by SPC website (1 week)</p> <p>1.4. A regional workshop to share the study</p> <p>1.4.a. Recruitment of national consultant based at SPC (2 weeks)</p>			<p><b>Inputs</b></p> <p>ADB: \$70,000</p> <p>Republic of Korea e-Asia and Knowledge Partnership Fund: \$500,000</p> <p>SPC: \$20,000 (in-kind contributions)</p> <p>10.5 person-months of international consultancy and 7 person-months of national consultancy</p>

<p><b>Activities with Milestones</b></p> <p>1.4.b. Developing agenda and identifying keynote speakers, speakers, discussants, facilitators, invitees, etc., in consultation with SPC (3 weeks)</p> <p>1.4.c. Regional workshop organized (1 week)</p> <p><b>Phase 2</b></p> <p>2.1. Feasibility studies of three potential ICT interventions for inclusive growth and poverty reduction</p> <p>2.1.a. Agreement on the three potential ICT interventions and outline of feasibility studies against a set of criteria in consultation with SPC and partners (4 weeks)</p> <p>2.1.b. Conduct feasibility studies (8 weeks, including 2 weeks field work)</p> <p>2.1.c. Draft feasibility studies for internal review and stakeholder consultations (2 weeks)</p> <p>2.1.d. Final feasibility studies (1 week)</p> <p>2.2. Investment proposals for 1–2 ICT interventions for ADB and other partners</p> <p>2.2.a. Recruitment of international consultant for proposal development (3 weeks)</p> <p>2.2.b. Draft proposals for internal review and discussions (4 weeks)</p> <p>2.2.c. Internal review and revision (3 weeks)</p>	
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ADB = Asian Development Bank, DMC = developing member country, ICT = information and communication technology, SPC = Secretariat of the Pacific Community, TA = technical assistance.

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

<b>Item</b>	<b>Total Cost</b>
<b>A. ADB Financing</b>	
1. Consultants	
a. Remuneration and Per Diem	
i. International Consultants	62.50
b. International and Local Travel	7.50
<b>Subtotal (A)</b>	<b>70.00</b>
<b>B. Republic of Korea e-Asia and Knowledge Partnership Fund<sup>a</sup></b>	
1. Consultants	
a. Remuneration and Per Diem	
i. International Consultants	250.00
ii. National Consultants	21.00
b. International and Local Travel	95.00
c. Reports and Communications	10.00
2. Equipment <sup>b</sup>	10.00
3. Workshops	
a. Facilitators	5.00
b. Venue/logistics	29.00
4. Miscellaneous Administration and Support Costs	30.00
5. Contingencies	50.00
<b>Subtotal (B)</b>	<b>500.00</b>
<b>C. Secretariat of the Pacific Community</b>	
1. Administrative and logistical support, staff time, and other in-kind contributions	20.00
<b>Subtotal (C)</b>	<b>20.00</b>
<b>Total</b>	<b>590.00</b>

<sup>a</sup> Administered by the Asian Development Bank.

<sup>b</sup> Two laptop computers, one printer, and stationery.

Source: Asian Development Bank estimates.

## OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

### A. Composition of the Team

1. International and local consultants will be hired to assist the executing agency, ADB and the implementing agency, the Secretariat of the Pacific Community (SPC), in implementing the technical assistance (TA). In order to fully leverage SPC's coordinating role, consultants will be based at SPC's headquarters but their administration will be supported by ADB so that SPC is not burdened with TA administration. In order to ensure that knowledge and contacts gained from the TA are retained within ADB, the Pacific Department of ADB will assign a staff to coordinate and monitor the inputs of individual consultants who are professionals with relevant skills and experience in (i) telecommunications infrastructure financing and business modeling; (ii) ICT for inclusive growth and poverty reduction, (iii) ICT for development and information management, (iv) ICT feasibility studies and proposal writing, (v) economic and financial analysis, and (vi) workshop organization and coordination. The consultants will also work with the Private Sector Development Initiative team based in the Pacific Liaison and Coordination Office in Sydney, Australia, for opportunities in public-private partnerships and potential ADB financing.

### B. Scope of Works

2. The following describes the consultant positions to be filled, the expertise required, and the expected inputs.

#### 1. **Telecommunications Infrastructure Specialist** (international, 1.5 person-months)

3. The consultant shall have at least 10 years of experience in telecommunications and ICT infrastructure business with strength in demand projection, financing options, and latest business models, especially in emerging and developing markets. He or she shall have experience and knowledge of the context of Pacific or other small island countries. Previous experience working with Pacific telecommunication operators and the private sector is an advantage. The consultant will

- (i) Under the guidance of SPC and ADB, in consultation with selected government agencies, Pacific Islands Telecommunications Association (PITA) and Pacific Islands Forum Secretariat, and in reference to international and regional best practices in telecommunication infrastructure, develop financing options and business models,
- (ii) Assess relevant regulatory issues (i.e. competition policy, open access, universal service obligations, etc.) in proposed business models,
- (iii) Conduct in-country consultations on different options for refinement, and
- (iv) Finalize the business model and financing plan.

#### 2. **Specialist in ICT for Inclusive Growth and Poverty Reduction** (international, 3 person-months)

4. The consultant shall have an advanced degree in economics, sociology, public administration, business administration, or other related area of social science or engineering and at least 10 years of experience in developing and evaluating ICT policy, strategy, and program and project design in developing countries, especially in rural and remote areas.

Experience and knowledge of the Pacific and its challenges are required. Proven analytical and writing skills are essential. The consultant will do the following:

- (i) Take responsibility, under the guidance of SPC and ADB, for delivering phase 1 outputs as indicated in the design and monitoring framework and in accordance with the standard format of an ADB report.
- (ii) Assess the current state of development of the telecommunications and ICT sectors in the Pacific, referring to the following documents:
  - (a) Enhancing Pacific Connectivity—The Current Situation and Opportunity for Progress (UNESCAP);
  - (b) ADB's project on South Asia Subregional Economic Cooperation Information Super Highway;
  - (c) Regional Telecoms Backbone Network Assessment and Implementation Option Study (World Bank);
  - (d) Information and Communications Technology (ICT) Pacific Strategy;
  - (e) University of South Pacific (USP) Net Studies;
  - (f) Socioeconomic impact of liberalization of telecoms sectors in the Eastern Caribbean Telecommunication (ECTEL) member states;
  - (g) Costs and Benefits of Deregulating Telecommunication Markets in the Pacific Studies Series, Volume 3 (James McMaster for ADB);
  - (h) Pacific Islands Regional Input Paper, Asian Regional Conference for the World Summit on the Information Society, Tokyo, Japan Pacific Islands Forum Secretariat (PIFS);
  - (i) Various materials presented in the PITA conferences; and
  - (j) Any other relevant documents.
- (iii) Conduct a quick study of past, ongoing, and planned ICT initiatives in the Pacific to distill lessons and best practice for possible replication.
- (iv) Identify global best practices of ICT for inclusive growth and poverty reduction, in which are applicable to the Pacific.
- (v) Build a preliminary list or menu of ICT interventions that are expected to have sizable and tangible impact on inclusive growth and poverty reduction and be suitable for implementation in the Pacific.
- (vi) Refine and modify terms of reference for a national ICT consultant to develop an online resource catalogue in consultation with the ADB ICT technical specialist.
- (vii) Provide guidance and supervision to a national consultant in designing, collecting information, and developing an online resource catalogue.
- (viii) Plan and conduct, with ADB ICT specialists, a field survey to
  - (a) establish contacts and consult with selected regional and national counterparts to inform the scope of the TA and progress and seek their feedback on the preliminary list or menu of potential ICT interventions;
  - (b) collect additional information to fill information gaps in the desk studies (available ICT services and price structure, service providers, existing or planned ICT initiatives, potential partners from government, communities (nongovernment and community services organization and schools, etc.), and the private sector);
  - (c) quickly assess the impact and successes of past or ongoing ICT initiatives for potential replication and/or distilling of lessons;
  - (d) identify any regulatory bottleneck in introducing new applications or services and other institutional issues including existing capacity;
  - (e) identify and assess demand for different types of ICT interventions;
  - (f) identify priority sectors, geographic locations, and groups for inclusive growth and poverty reduction in target countries based on ADB's and

- other partners' analysis of poverty and economic development and in consultation with SPC and selected countries;
- (g) enhance and revise the list or menu of potential ICT interventions based on field observations and consultations; and
  - (h) share the revised list or menu of potential ICT interventions, customized by country, with partners to seek initial commitment.
- (ix) Draft a study of regional ICT interventions for inclusive growth and poverty reduction, conduct an internal and external review to solicit feedback, and revise it. The study should include recommendations on enabling policy and regulatory reform for service expansion and key intervention areas for consideration by governments, regional institutions and donors.
  - (x) Present the study in a regional workshop and at the PITA annual conference.
  - (xi) Further revise and finalize the study based on workshop feedback.

### **3. ICT for Development Consultant** (national, 2 person-months)

5. The consultant shall have a degree in business administration, public administration, information management, or other related field and at least 5 years of relevant experience in ICT for development and e-services, especially in the context of rural and remote areas in developing countries. Skills and knowledge in using HTML or other web-based knowledge management tools are an advantage. Experience in, and knowledge of, the Pacific is also an advantage. The consultant will:

- (i) Develop a framework for cataloguing online resources under the guidance of the consultant for ICT for the inclusive growth and poverty reduction and in consultation with SPC for guidance in technical issues for inclusion in the online catalogue and a regional study on the SPC website;
- (ii) Search for resources available on line and collect and classify them in a user-friendly and easily accessed format, with a brief introduction of the highlights of each resource; and
- (iii) Assist the consultant for ICT for inclusive growth and poverty reduction in a desk study and identify global best practices as required.

### **4. Feasibility Study and Proposal Writing Consultants** (1 international, 3.5 person-months, and 1 national, 3.5 person-months)

6. Each consultant shall have an advanced degree in economics, sociology, public administration, business administration, or other related area of social science or engineering and at least 10 years of experience in developing and evaluating ICT policy, strategy, and program and project design in developing countries. Proven experience and skills in conducting feasibility studies and preparing project proposals following ADB standards are required. The consultants will do the following:

- (i) Conduct, under the guidance of the team leader in ADB, feasibility studies of selected potential ICT interventions by
  - (a) identifying information and communications needs in the target population and geographic location;
  - (b) identifying the most appropriate and affordable technology that will meet those needs;
  - (c) identifying value-added services and an adequate form of shared services;
  - (d) giving priority to women, the poor, unemployed youths, and other disadvantaged groups;
  - (e) constructing options for the price structure, including the lowest possible

- price for sustainable commercial operation and cross-subsidy among different services and user groups, etc.;
- (f) projecting demand in a realistic manner to determine the costs and benefits of proposed investment;
- (g) developing models of public–private partnership and other business models;
- (h) identifying the capacity development needs of partners;
- (i) reviewing the existing legal, administrative, and regulatory environment in selected countries that may affect, negatively or positively, the proposed intervention and identifying areas of improvement and likely quick-wins; and
- (j) exploring appropriate institutional arrangements for proposed interventions.
- (ii) Conduct consultations with stakeholders to build commitment.
- (iii) Write feasibility studies in consultation with ADB, SPC, and selected country stakeholders.
- (iv) Develop, based on the feasibility study, investment proposals for ADB and other interested partners in line with ADB requirements.
- (v) Conduct consultations with relevant stakeholders.

**5. ICT Economist** (international, 2.5 person-months)

6. The consultant shall have an advanced degree in economics, business administration, or other related area of social science or engineering and at least 10 years of experience in developing and assessing ICT investment plans in developing countries. Proven experience and skills in conducting economic analysis and preparing project proposals following ADB standards are required. The consultant will do the following:

- (i) Develop criteria for selecting projects that are economically justified, simple, and efficient.
- (ii) Conduct the economic analyses for selected projects and for the overall project in accordance with ADB's *Guidelines for the Economic Analysis of Projects*.
- (iii) Assess the impacts of the project on poverty reduction and income generation.
- (iv) Identify project benefits and costs, including quantifiable and unquantifiable benefits to the general economy.
- (v) Elaborate project risks and measures to mitigate these risks.
- (vi) Undertake least-cost analysis by comparing alternatives based on the feasibility studies.
- (vii) Review economic viability of all policy advice, including the maintenance and operation policy and project structure.

**6. Workshop Coordinator** (national, 1.5 person-months, to be hired by SPC).

7. The consultant shall have a degree in business administration, public relations, communications, or other related field and at least 3 years of experience in organizing workshops and events. Experience in dealing with public and private sector partners is required, as are excellent communication and coordination skills. The consultant will

- (i) Design, prepare, and facilitate, in consultation with ADB and SPC, the proposed regional workshop;
- (ii) Coordinate invitations, agenda, and the necessary materials; and
- (iii) Write a workshop report.