Options for Funding ICT for Development

APCICT Briefing Note No. 8
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Summary

The use of ICTs in national economic development has become a strategy for many governments in the region. However, many governments face challenges in effectively harnessing the benefits of ICTs. Among the difficulties that governments face is limited financial and technical means to embark on meaningful ICT projects. Understanding diverse funding structure and options available for government to tap into in carrying out ICT for development projects is essential. This briefing note aims to: discuss the issues that influence investments in ICT deployment, with a focus on e-government projects; highlight various financing mechanisms; and examines the different types of public private partnerships for funding ICT for development and e-government projects.

This briefing note is drawn from the eighth of ten core modules of the Academy of ICT Essentials for Government Leaders (Academy). The Academy is a comprehensive ICT for development training curriculum that aims to equip policymakers with the essential knowledge and skills to fully leverage opportunities presented by ICT to achieve national development goals and bridge the digital divide. More information on the Academy is available at http://www.unapcict.org/academy.

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1. Introduction

ICTs are becoming ubiquitous. Their diffusion and use are growing at rapid rates, especially in the Asia Pacific region.

A new phenomenon is the increase in the availability and diffusion of wireless broadband in the region and the success of technologies such as smart phones. Upper middle and high income countries are fast adopters whereas lower middle and lower income countries are noteworthy laggards, although this is expected to change within the coming few years.

To fund universal access to the ICT infrastructure upon which broadband, wireless and other information technologies are based, governments need access to financial resources to ensure that all benefit from the information economy.

In many countries of the region and of the world, competition for these resources is fierce, especially in this era of recession and global economic slowdown, and the long recovery that has been predicted. The recession has limited the ability of governments to raise funds from taxes, duties and other fees and levies to fund infrastructure development, and the provision of ICT-based services such as e-government.

However, there are also new opportunities to attract investment in ICT opportunities. These include the increasing wealth of some developing countries and the increasing role of sovereign wealth funds (SWFs).[1] There are signs indicating that the Asia Pacific region has not been affected as much by the economic slowdown as North America and Europe have been. Data from the Organisation for Economic Co-operation and Development (OECD) shows that ICT production in China, Japan, the Republic of Korea and Taiwan has been accelerating since early 2009.

Countries are pouring money into their economies in order to stimulate economic growth. This is leading some countries to focus on newer forms of production designed to reduce greenhouse gas emissions and increase energy efficiency while continuing to contribute to economic growth and development. The term 'Green Growth' has been coined to capture this trend. Several of the OECD countries have focused on green growth strategies, using ICTs as tools to tackle climate change as part of a Green Growth strategy.

In this context, another opportunity is the role that ICTs can play in reducing energy consumption and greenhouse gas emissions. One recent study undertaken by the Commission of the European Communities suggests that ICTs could potentially reduce energy consumption by 53 percent by the year 2020 if appropriate steps are taken now to use ICTs in a rational and planned fashion that would optimize energy consumption and use over time.[2]

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[1] With the increasing public revenues generated from the payment of fees, taxes, and/or royalties on the exploration and export of oil and minerals (e.g. in the Gulf States, Russia) or from a large and very favourable balance of trade (e.g. China, Singapore), many countries have acquired large amounts of foreign exchange and are increasingly looking for opportunities to invest this new found wealth. SWFs are a financial vehicle designed to help countries manage and invest their excess incomes.

[2] Bio Intelligence Service, *Impacts of information and communication technologies on energy efficiency. Tender No. CPP16A-2007 / 2007 / S 68-082361. Final report* (Paris, September 2008), http://cordis.europa.eu/fp7/ict/sustainable-growth/studies_en.html.

2. Different Funding Modalities

Governments and other development actors rely on different sources for funding ICT for development activities. Under usual circumstances, governments depend on funds from the public treasury to finance ICT infrastructure and service investments such as e-government services. Other sources of funding exist based on collaboration between the public and private sectors.

In these cases, the government provides an enabling environment to encourage the participation and involvement of the private sector in funding and operating public infrastructure and services. In funding expensive yet basic ICT infrastructure such as fibre optic networks, governments may look at a collaborative funding model involving the private sector not only to fund the installation, but also to secure its operation.

Governments may also outsource some of the work on contracts but retain all power over design and implementation as well as operations. A third way of funding an ICT project of public interest is to cede a concession to the private sector for the provision of public services through a contract based on a public private partnership (PPP). A further variation is the multi-stakeholder PPP involving several partners from the public and private sectors as well as others such as NGOs and donors. Under certain circumstances, governments can also count on philanthropic contributions from the private sector. Best sourcing based on market testing is another option.[3]

3. Making Public Private Partnerships Work

The choice of these options varies and can be based on need, risk avoidance, the need for financing, the commercial potential of a given public service as well as other factors. In some cases, PPPs may require no funding from the government. For PPPs and other arrangements involving partnership between the public and private sectors to bear fruit, both parties must be able to work together.

One of the major stumbling blocks to PPPs is a lack of understanding on the benefits of working together. Given the very considerable benefits of PPPs and other funding mechanisms, significant efforts have been made by the donor community to encourage partnership between the public and private sectors. Open consultation between parties helps. Countries that are more open to business are more likely candidates for a PPP-based approach.

For PPPs to succeed, the following conditions must be met:

- Commitment from executive leadership
- A statutory foundation for partnering
- Direct public sector involvement
- A well-crafted plan
- Effective communication with stakeholders
- The right opportunity
- The right partner
- Well-defined management processes

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[3] In best sourcing, the government tenders proposals for service provision and challenges the market to come up with the most cost effective solution that is possible while ensuring and/or exceeding the specifications required of the service or product sought. The Government of Singapore has adopted this strategy of best sourcing through market testing. If a private company can deliver the service more cheaply and more effectively than a public sector entity, then it is hired to do the job.

PPPs have several advantages, mostly related to the transfer of or sharing of risk with the private sector partner(s) who in many circumstances will also assume financing, which can free public funds for other purposes. Working with a private sector partner also allows for more innovation in the implementation of the project and the development of alternate service delivery mechanisms to meet the needs of the public.

Because of the significant advantages of PPPs, efforts exist to build bridges between both parties using a variety of confidence and collaboration building measures such as public-private dialogues. Other significant advantages include whole life costing[4] and a focus on the delivery of service outcomes and not only outputs. For the private sector, advantages include access to new markets and opportunities, along with a high degree of predictability of cash flow as a result of working for a reliable client such as the government.

PPPs have been around for a long time. Their popularity received a significant boost in the early 1980s in the UK where the government experimented with them successfully in order to continue to provide public services without taxing rate payers or national accounts. Eleven percent of public spending in the United Kingdom is via a PPP model. Since then, the model has diffused around the world. In the recent past, PPPs were used mostly for large infrastructure projects, but this is changing. The PPP model can be used at various stages of the project cycle and also for whole project implementation.

There are various types of PPP concessions. These include Build-Own-Transfer (BOT), Build-Own-Operate-Transfer (BOOT), and management and service contracts and leases. The following figure shows the continuum of PPP types.
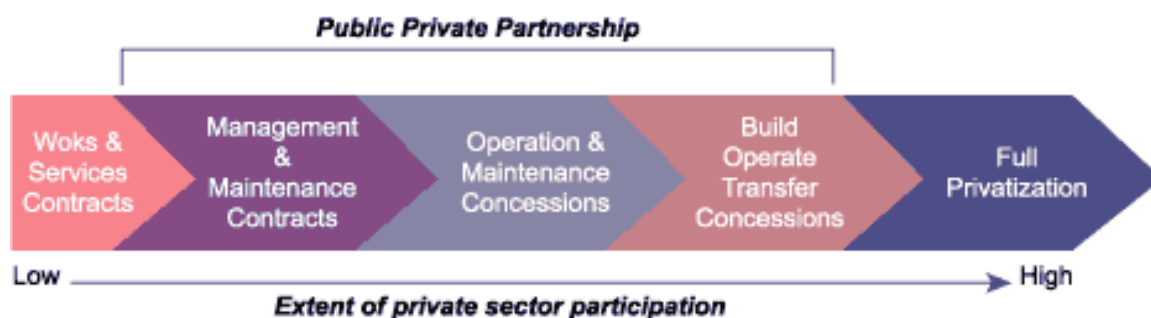
PPPs are not for all types of projects and circumstances. PPPs require that the right legal and regulatory regime be in place. In some jurisdictions, it may not be possible for the government to cede a concession to the private sector. In some cases, the provision of services electronically may not be possible and this may influence a PPP for ICT project implementation. For a PPP to be successful, several factors come into play, starting with a high level of public consultation to ensure buy-in and support from the public as well as from politicians. Good technical and managerial knowledge and expertise about the system to be put into place is also required. The credit rating of a country may also affect the likelihood that private sector operators will bid on the project.

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[4] A method of evaluating or comparing building materials and components by looking at installation costs, life spans, running and maintenance costs.

4. PPP and e-Government Projects

For e-government projects and ICT projects in general, there are several considerations. Not all e-government projects are fit to be implemented as a PPP. Projects that have a high degree of predictability are more likely candidates for consideration as a PPP. ICT projects have a high risk associated with their implementation. This is especially so for projects that require original coding to develop and/or to customize an application. Larger system wide projects such as government automation projects may also be riskier because it may not be possible to quantify the risks and measure accurately the level of effort required, especially when many people and organizations or departments are involved. These can be overcome by working with a partner that has demonstrated ability to deliver. One trend is to use a shared services approach[5] to the provision of public services. This reduces costs and in some cases, these shared services can be developed as a PPP.

PPPs can be used at all levels of government. In India, PPPs have been used successfully at the local and community level (Bhoomi and eSeVA centres in India). Some private sector operators have developed business models to provide government services using a PPP type of approach.

PPPs and ICTs have risks. ICT project risks are controlled by systematic planning and by putting into place detailed risk assessment and management plans and procedures. Communication with the parties and stakeholder consultation are required to reduce risk. A risk register can be put into place. The public has perceptions that will have to be managed. PPPs that meet the priority needs of the public tend to be less risky. Avoid complexity. IT projects are especially risky. Risk reduction procedures in these cases include the development of a common solutions framework and detailed enterprise plans to arrive at a standard approach to IT project management.

Not all e-government projects are acceptable for a PPP. Projects that provide services are more likely candidates.

5. Other Funding Options

There are several other funding sources that can be considered for implementing ICT projects. Foreign direct investment (FDI) benefits from a positive business environment. FDI inflows to the Asia Pacific region have been increasing and FDI outflows from the region have also been increasing. Venture capital is also available, but this has decreased as a result of the economic slowdown. Transnational corporations are also an important source of funding as part of their corporate social responsibility initiatives and also for goodwill purposes. International financial institutions and direct government to government flows are also increasing as a result of the increasing importance of SWFs. Debt swap financing can be an important way of accessing funds for ICT development projects.

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[5] With the shared services approach, government services are rationalized and consolidated in order to provide the public with comprehensive and efficient service through one window solutions. Some of the most widely accepted forms of shared services occur in the provision of IT services within the public sector, as well as in financial services, human resource management services and supply chain purchasing services.

6. Preparing and Resource Mobilization Strategy

The idea of developing a resource mobilization strategy is presented as a way of associating funding with project conception and design. Without funding, a project will not go forward so it is important to think strategically about this and to include this in project development plans.

Project proposals have common elements even though they may vary in their details from donor to donor. Knowing the nature of these common steps and what is required will help secure funding and can also have a role to play during the preparation of the project proposal and the resource mobilization strategy that goes with it.

The **APCICT Briefing Note Series** aims to provide at-a-glance information on key information and communication technology for development (ICTD) agendas for high-level policymakers and stakeholders. The series includes: 1) highlights of conventional research papers, assessment and survey reports and publications; 2) policy considerations drawn from the Academy modules; and 3) key challenges and lessons learned based on analyses of best practices and case studies.

APCICT, a regional institute of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), was established and inaugurated on 16 June 2006 in Incheon, Republic of Korea. The role and mission of APCICT is to strengthen the efforts of the 62 ESCAP member and associate member countries to use ICTs in their socio-economic development through building the human and institutional capacity for ICT. In pursuance of this mandate, APCICT's work is focused on three inter-related pillars – Training, Advisory Services and Research. The Briefing Note Series is part of the research pillar. Also under the research pillar is a Case Study Series that provides analyses and compilations of best practices and case studies on different aspects of ICTD and capacity building in the Asia Pacific region.