1. Country and Sector Background

**Pakistan’s economic growth has been dramatic but uneven.** While Pakistan has experienced a dramatic surge in economic growth in the past five years, the country is still divided in terms of income inequality and geographic disparities. These divisions are particularly pronounced in the rural areas and are sources of persistent poverty.

**Despite some reduction in overall poverty levels, non-income welfare indicators are still low.** Although rural poverty declined between 2001/02 to 2004/05, however, rural poverty rates in 2004/05 were still at levels in the 1990s. Non-income indicators of welfare related to the health and education are lower than those in neighboring countries. For example, infant mortality per 1,000 live births is 82 in Pakistan (88 in rural areas), compared to only 62 in India, 56 in Bangladesh, and 12 in Sri Lanka.

**Lack of access to credit and appropriate infrastructure are significant contributors to higher rural poverty rates.** A major reason for the growing disparities between urban and rural areas is the lack of access to credit and infrastructure in the rural areas. As in other South Asian countries, rural villages primarily consist of family-based micro-enterprises. Lack of access to credit, electricity, and telecommunications limits production and private investment into income-generating activities. For the rural poor, escaping poverty is requires revitalization of the rural economy, through increased investments in infrastructure and improvements in the delivery of public and private services.

**The Government of Pakistan (GOP) recognizes the information and communications technologies (ICT) sector to be a key input to Pakistan’s economic growth and poverty reduction efforts and has undertaken reforms resulting in tremendous growth in the sector.** The GOP further recognizes that widespread connectivity is critical for its citizens to benefit
from basic ICT-enabled services and therefore is focusing efforts on extending access to such services in rural areas.

The GOP has implemented impressive sector reforms. Over the past 10 years the GOP has taken significant steps towards creating a progressive regulatory environment. Some of these steps include the 1996 Telecommunication Reorganization Act, the establishment of an independent regulator, the 1997 Pakistan Telecom Authority (PTA), and the subsequent amendment of the Telecommunication Act in 2005. These steps have created an environment for interconnection, and tariff and licensing regimes that is conducive to competition. In addition, there are four major policies that have been introduced in the sector, namely, the Deregulation, Mobile, Broadband and Universal Service Fund (USF) policies. The approval and implementation of these policies are directly linked to improved sector performance.

Significant gaps remain and the urban-rural digital divide is likely to widen. According to the USF policy document, despite significant developments in the sector, rural fixed-line teledensity remains at 1.4 percent. Further, it is estimated that 99.8 percent of the urban population and 72.5 percent of the rural population has mobile coverage. However, rural coverage varies between the four provinces. For instance, 80 percent of the rural population in Punjab and NWFP has mobile coverage, whereas the gap is particularly acute in Balochistan with approximately 86 percent of the rural population without coverage. This gap is likely to widen over the course of the next 5 years as mobile operators continue to focus on the urban and peri-urban markets. There is therefore a growing rural-rural divide in addition to the urban-rural divide. The GOP is concerned that the urban-rural digital divide will further widen excluding the rural poor from benefiting from developments in the ICT sector.

Further, regulations and policies require continued updating to keep up with the rapidly evolving ICT sector. Pakistan has experienced tremendous growth in the telecommunications sector over the past 5 years. This growing and highly competitive sector is producing innovative technological applications as well as new business models for the provision of services which are challenging regulatory and policy-making capacity of the government. The GOP recognizes the need for the continuous development of appropriate policy and regulatory frameworks to meet the needs of the market. These include approaches to increasing broadband penetration, shared infrastructure licensing, convergence policies, and other ICT related issues. In addition to these emerging issues, the Pakistan Telecommunication Authority (PTA) requires upgrades to the spectrum management system to put in place an effective system to manage the growing competition and introduction of new wireless technologies and services such as 3G.

In addition, the government is planning to invest close to USD 375 million on various e-government related initiatives, which will require development of an appropriate policy framework and institutional structure. Given these substantial planned investments, the GOP recognizes the need for an adequately staffed and credible e-government policy-setting agency that would be responsible for developing the appropriate technical and interoperability framework for such initiatives. Such an agency will also help in coordinating the various e-government initiatives and to reduce inefficiencies such as redundant project investments.

2. Objectives
The project’s development objectives are to: a) increase access to information communication infrastructure and services through a market driven approach to rural and unserved areas, b) ensure that the regulatory and policy environment can continue to sustain market competitiveness in the future. The project development objectives will be achieved through the following steps:

- leveraging private investments to extend access to information and communication infrastructure and services;
- implementation of the USF policy to provide competitively based capital subsidies to extend access to modern telecommunication services in rural areas;
- development and implementation of a new ICT policy and regulations that deals with next generation technological innovations in the sector;
- development and implementation of a credible national e-government policy that will help improve public service delivery; and
- implementation of an improved modern automated spectrum management and monitoring system.

This project is at the core of the Bank’s agenda of poverty reduction and economic growth. The project is consistent with the Country Assistance Strategy (CAS) FY06-09 strategic objective of removing infrastructure bottlenecks to support sustained and rapid economic growth. CAS objectives that are pertinent to the project include: (i) supporting reform processes, including privatization and private sector participation in public utilities, technical assistance and capacity building to strengthen institutions in specific sectors, (ii) developing legal and institutional framework to encourage private-public partnerships, and (iii) undertaking IBRD investment operations where reforms have advanced sufficiently to make public investment effective.

3. Rationale for Bank Involvement

There are a number of compelling reasons for the Bank to support GOP’s initiative to continue developing its ICT sector and to extend services into rural areas. The Bank is involved in dialogue on telecommunications sector reform in around 80 countries, including in South Asia. Furthermore, the Bank has substantial experience in Africa, Asia and Latin America, in implementing the output-based aid (OBA) subsidy scheme which will be the mechanism to be used for the Rural Access initiative under the USF program. In addition, the Bank can provide international experience in addressing telecommunications sector reform issues, establishing policy and regulatory frameworks, facilitating rural access, and supporting e-government programs.

4. Description

The proposed project has three main interrelated components aimed at achieving the aforementioned project development objective. The first component will provide Technical Assistance (TA) to strengthen institutional capacity of the MOIT/EGD to develop an adequate policy and regulatory framework to address the next generation telecommunication issues, and establish a credible e-government policy. The second component, and primary focus of the
project, will expand access and increase utilization of ICTs in rural and remote areas through the implementation of the USF Policy. The third component will provide TA to PTA/FAB for strengthening the regulatory function and supporting the radio frequency monitoring and management functions to improve spectrum allocation efficiency and subsequently sector performance.

Component 1: Strengthening Policy Functions of MOIT/EGD
This component will finance TA to strengthen institutional capacity to enable the GOP to effectively address issues arising from an increasingly complex and competitive sector. TA will be provided to MOIT in the following policy areas: convergence and policy review, new legislation, and training of staff. The second part of this component includes TA for Electronic Government Directorate (EGD), which will provide support to two activities, (i) establishing a robust policy framework to meet national e-Government objectives, and (ii) developing innovative PPP models to be piloted in select areas of the country.

Component 2: Accelerated Rural Connectivity
In this component, World Bank funding will support Phase I of the GOP’s program to extend ICT services into unserved, rural and remote areas. This project will aim to bring teledensity from 0 to 10 percent in the uncovered rural areas. This component will specifically provide investment to the USF which will be put towards providing incentives for private investment through output-based aid (OBA) type mechanisms. This component will further provide TA and training to assist in the capacity building and strengthening of the Universal Service Fund Company (USFC) and to support the Phase I and II preparation, implementation, and management and monitoring functions.

Component 3: Strengthening Regulatory and Spectrum Management Functions of PTA/FAB
This component will provide TA and investments for strengthening the regulatory framework, which includes spectrum policy, pricing and management, sector reviews, and training to PTA/FAB. This component will also include technical assistance to help PTA in addressing outstanding regulatory concerns with regards to increasing broadband penetration, promoting infrastructure sharing and licensing and other regulatory topics that may arise over the course of the project.

5. Financing

Source: ($m.)
BORROWER/Recipient 19.76
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT 120.10
Total 139.86

6. Implementation
The MOIT will be the coordinating agency for the project. It will be responsible for project coordination across the three related implementing agencies, PTA, USFC, and MOIT. MOIT will establish a Project Coordination Unit (PCU) that will be responsible for project coordination across the related agencies.

Each implementing agency will appoint a project director who will be responsible for project management and will be supported by qualified staff responsible for procurement and financial management activities.

7. Sustainability

The risk of the project not being sustainable is low. As a result of the project, an improved policy setting and regulatory capabilities will have been achieved to address new market trends. Increased rural penetration should increase telecommunications investments and revenue, fostering greater competition and reducing costs to the consumer. Although the risk of sustainability of the World Bank funded portion of the project is fairly low, GOP’s commitment to fulfilling its obligation to transfer funds to the USFC will be a critical factor to the overall sustainability of the USF program, beyond the first phase.

The strengthening of EGD would help create an effective national e-government policy setting agency that will have the mandate to implement a national e-government program. It is expected that a national e-government program will be an integral part of government operations in the future as the demand for improved government efficiency and service delivery continues to grow. One of the requirements for the TA to develop the National e-Government Strategy will be to identify ways to create a self sustaining funding mechanism for EGD so that reliance on future government funding will not be required.

8. Lessons Learned from Past Operations in the Country/Sector

The project draws on lessons learned from previous and ongoing Bank-financed projects in ICT, and from ongoing efforts in neighboring countries such as India and Sri Lanka. Broad global experience of ICT project implementation indicates that ICT project success is primarily contingent on strong country ownership and sustained commitment to implementation. The proposed project design has been guided by GOP’s USF Policy and other development policies that are fully owned by the government. Other lessons learned are summarized below.

- **Independence of the USF and historically low disbursement rates.** Globally, the average disbursement rate of USF is said to be around 30 percent. This poor record has prompted the GOP to separate the management and implementation of the USF from MOIT’s operations. Although the USFC is bound by the USF Policy, its independence will help to ensure that the implementation and disbursement functions will not be delayed by normal government processes. Although, the USFC is managed by an independent management team, it is important to note that the board structure has three government representatives and may also require a restructuring in order to maintain complete independence.

- **Rural access can be improved through bundling of other value-added services.** Global experience indicates that in order to ensure greater ICT penetration and adoption, particularly
in rural areas, it is critical to bundle additional value-added services with the traditional voice packages. This makes the service provision more economically feasible for the operators and meets the high demand for value added services by the rural communities. Some examples of such services could include basic mobile payment services, market and job related services that can be provided through simple SMS applications.

- **Infrastructure sharing is critical to maintain competitiveness in rural markets and reduce market distortions.** Promoting infrastructure sharing is critical in ensuring that competitive market forces drive growth in rural markets. Capital subsidies for passive infrastructure should be accompanied with infrastructure sharing requirements so that operators do not take advantage of being sole service providers in some rural areas. The USF Policy requires mandatory infrastructure sharing for any capital subsidies awarded through the USF. Appropriate safeguards will also be incorporated into the bidding documents to ensure that these policies are adequately adhered to.

- **A National Roaming policy may help reduce the need for redundant infrastructure investments, particularly in rural areas.** Currently, there is no national roaming policy in place for Pakistan. Roaming allows for cellular customers to access telecommunication services when traveling outside of the geographic coverage of the home network, by using another carrier’s network. By doing so, the requirement for infrastructure investments to cover a specific area would be less and would result in a more efficient use of capital. However in Pakistan there is no national roaming policy that permits cellular subscribers to access a competitor’s network. This is a particularly significant issue in rural areas where infrastructure roll out cost would be economically prohibitive for more than one operator. By encouraging national roaming agreements between operators, the Regulator could help promote greater infrastructure roll out in rural areas. The cellular license agreement has a provision of national roaming with an objective to promote competition in rural areas.

- **Effective organizational structures are paramount to the rollout of national e-government programs.** Global experience has shown that in order to implement effective national e-government programs, an effective institutional structure is required. A centralized national e-government agency would help develop e-government policy that cuts across a broad cross section of government agencies. These agencies typically deal with issues related to interoperability standards, training, research, and funding. The project has taken this into account and will be developing a long term e-government strategy that will help that the appropriate institutional structures are in place to implement a long term program.

- **Adequate policy and regulatory capacity is required to keep up with very rapid technological advancements and innovations in the sector.** While the rapid technological advancements in the ICT sector allow for greater access to information at reduced costs to the consumer, these advancements typically put a strain on regulators to keep up with such innovations. These challenges are faced by regulators in low income and high income countries alike. It is critical that policy makers and regulators keep abreast of new innovations in technology and business models and adapt policy so as not to constrain market adoption of beneficial innovations. This is why a significant portion of the project will be focused on capacity building and technical assistance.

- **Private sector involvement and consultation is required at all stages of the project design and implementation.** Ensuring an open and transparent dialogue and consultation with the private sector and related stakeholders will help reduce implementation obstacles
such as legal challenges and stay orders that could halt implementation altogether. Maintaining open and transparent dialogue will also help in attracting sufficient private investments.

9. Safeguard Policies (including public consultation)

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<tr>
<td><strong>Environmental Assessment (OP/BP 4.01)</strong></td>
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<td>Projects on International Waterways (OP/BP 7.50)</td>
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10. List of Factual Technical Documents

Project Concept Note

Minutes of the Project Concept Note Review Meeting

Minutes of the Quality Enhancement Review Meeting

Aide Memoire by World Bank missions

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* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas
Web: http://www.worldbank.org/infoshop