Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 17-Jan-2023 | Report No: PIDA31211
### BASIC INFORMATION

#### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>P174402</td>
<td>Islamic Republic of Pakistan: Digital Economy Enhancement Project</td>
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<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
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<tbody>
<tr>
<td>SOUTH ASIA</td>
<td>18-Jan-2023</td>
<td>16-Mar-2023</td>
<td>Digital Development</td>
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<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
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<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Islamic Republic of Pakistan</td>
<td>National Information Technology Board, Board of Investment, Ignite National Technology Fund, Ministry of Information Technology and Telecommunication, National Database and Registration Authority</td>
</tr>
</tbody>
</table>

#### Proposed Development Objective(s)

The PDO is to enhance the Government’s capacity for digitally enabled public services delivery for citizens and businesses.

#### Components

1. **Component 1. Improving Digital Economy, Governance and Service Delivery Capabilities**
2. **Component 2. Pakistan Business Portal**
3. **Component 3. Project Management**
4. **Component 4. Contingent Emergency Response Component**

### PROJECT FINANCING DATA (US$, Millions)

#### SUMMARY

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Project Cost</strong></td>
<td>78.00</td>
</tr>
<tr>
<td><strong>Total Financing</strong></td>
<td>78.00</td>
</tr>
<tr>
<td><strong>of which IBRD/IDA</strong></td>
<td>78.00</td>
</tr>
<tr>
<td><strong>Financing Gap</strong></td>
<td>0.00</td>
</tr>
</tbody>
</table>
B. Introduction and Context

Country Context

1. **Over the past two decades, Pakistan has achieved significant poverty reduction**, but human development outcomes have lagged, and economic growth has remained volatile and slow. Expansion of off-farm economic opportunities, and the increase in migration and associated remittances allowed over 47 million Pakistanis to escape poverty between 2001 and 2018. Despite rapid poverty reduction, human capital outcomes have remained poor and stagnant, with high levels of stunting at 38 percent and learning poverty at 75 percent. Pakistan has also experienced frequent macroeconomic crises due to a growth model based on private and government consumption, with productivity-enhancing investment and exports contributing relatively limited gains. Growth of per capita gross domestic product (GDP) has been low, averaging under two percent in the last two decades. Recent unprecedented floods are likely to have serious impacts on poverty, human development outcomes and economic growth.
Sectoral and Institutional Context

2. **Pakistan has started its digital transformation.** Internet access, particularly mobile, and demand for digital services have been increasing, notably during the pandemic. However, Pakistan lags on most digital development rankings relative to regional comparators, notably on digital infrastructure (connectivity), digital government and the enabling environment for the digital economy (see Table 1).

### Table 1. Pakistan’s Digital Development and Global Benchmarks

<table>
<thead>
<tr>
<th>Country</th>
<th>Digital Evolution Index 2020 (rank of 90)</th>
<th>UN E-Government Development Index 2022 (rank of 193)</th>
<th>WEF Network Readiness Index 2021 (rank of 139)</th>
<th>UNACTAD B2C eCommerce Index 2020 (Rank of 151)</th>
<th>AT Kearney Global Services Location Index 2019 (rank of 50)</th>
<th>GSMA Mobile Connectivity Index 2019, Infrastructure (0-100)</th>
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<tbody>
<tr>
<td>India</td>
<td>61</td>
<td>105</td>
<td>67</td>
<td>71</td>
<td>1</td>
<td>55.2</td>
</tr>
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<td>64</td>
<td>89</td>
<td>83</td>
<td>96</td>
<td>10</td>
<td>64.9</td>
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<td>Malaysia</td>
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<td>30</td>
<td>3</td>
<td>66.7</td>
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<td>Pakistan</td>
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<td>150</td>
<td>97</td>
<td>116</td>
<td>37</td>
<td>49.1</td>
</tr>
<tr>
<td>Singapore</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>4</td>
<td>34</td>
<td>88.9</td>
</tr>
<tr>
<td>South Korea</td>
<td>11</td>
<td>3</td>
<td>12</td>
<td>10</td>
<td>-</td>
<td>81.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>68</td>
<td>95</td>
<td>78</td>
<td>91</td>
<td>25</td>
<td>55.2</td>
</tr>
<tr>
<td>Turkey</td>
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<td>48</td>
<td>45</td>
<td>57</td>
<td>39</td>
<td>80.6</td>
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<tr>
<td>Vietnam</td>
<td>60</td>
<td>86</td>
<td>63</td>
<td>63</td>
<td>5</td>
<td>59.9</td>
</tr>
</tbody>
</table>

*Note: Latest available benchmark data, sources above.*

3. **The key institutions responsible for Pakistan’s digital development are, at the federal level, the Ministry of Information Technology and Telecommunications (MoITT) including its subsidiary agencies:** the National Information Technology Board (NITB) in charge of the federal administration digital transformation, and the Ignite National Technology Fund (Ignite) responsible for research and innovation. The National Database and Registration Authority (NADRA) is responsible for the country’s national identification system and other registries, maintenance of multipurpose databases and data warehouses, interfacing of government databases, and as a development of digital government systems. The Board of Investment (BoI) under the Office of the Prime Minister, oversees promoting investment in all sectors of the economy and facilitating local and foreign investment. The BoI also acts as the secretariat of the Steering Committee on the Pakistan Regulatory Modernization Initiative (PRMI), which aims at improving the ease of doing business in the country. At the provincial level, the IT Boards of Punjab and Khyber Pakhtunkhwa (KP), and the IT Departments of Baluchistan and Sindh are responsible for managing provincial foundational IT infrastructure, modernize and digitalize service delivery, as well as foster digital literacy. Coordination between these different entities is necessary to support the inclusive and resilient digital transformation of the country.

4. **Pakistan demonstrated recent bright spots in digital government services - such as the successful use of digital technologies to rapidly deploy the Emergency Cash Program to mitigate the socioeconomic effects of the pandemic, demonstrating the power of the national identity (ID) system managed by NADRA and socioeconomic data in the National Socio-Economic Registry (NSER). Pakistan’s Instant payment system (RAAST) also offers new possibilities for digital government-to-persons payments.**
Furthermore, nearly 4 million citizens have been using the Pakistan Citizen’s Portal, a smartphone application that promotes a citizen-centric participatory governance and serves as a nationwide grievance redressal system.\(^1\) These initiatives are demonstrating the potential of offering broader digital government and private services. However, a holistic approach to digital government services is largely missed.

5. **The digital economy has been growing, especially in Tier 1 cities, increasing the need for connectivity, online payments, secure and trusted digital transactions.** The start-up sector in Pakistan is particularly vibrant and contributing to the development of private digital services. It has demonstrated steady growth in recent years, raising about $486 million between March 2021 and March 2022. This trend is encouraging youth in Tier-2 and Tier-3 cities to form start-ups and become part of the digital economy. Various government agencies – such as provincial IT Boards, Ignite, and the Pakistan Software Export Board – are providing support to start-ups such as incubation services, skills courses, co-working office spaces, and linkages with other start-ups and investors. Ridesharing and e-commerce start-ups have created jobs in transport, delivery, and logistics businesses that are smartphone-dependent but do not require formal education. The online gig economy is also booming. Pakistan is currently the fourth largest provider of workers to online freelancing platforms globally. However, the participation of women is still limited in a country where only 21 percent of women participate to the active workforce.\(^2\)

6. **The policy and regulatory environment in Pakistan require improvement in the form of revisions, implementation support and better coordination between the regional and federal governments.** The Federal Government\(^3\), regional governments of Khyber Pakhtunkhwa\(^4\) and Punjab\(^5\) provinces have approved digital policies. The Digital Pakistan Policy (2018) calls for a holistic approach to digitalization of services through improvements in infrastructure and policy frameworks. The Digital Pakistan policy is based on the longstanding realization within the policy makers that there needs to be a shift from the piecemeal approach to digitalization. The state governments’ digital policies hinge on four key points including improving connectivity, digital government services, literacy, and economy. In support of specific sectoral needs such as cloud computing and right of way requirements of the telecom operators, the federal government has approved Pakistan Cloud First Policy (2022) and Public & Private Right of Way Policy Directive (2020).\(^6\) A data protection bill has been drafted and issued for initial consultations, but further work is needed to align the bill with global best practices and to ensure that the domestic data economy is not unduly restricted. However, despite the policy instruments available at the federal and provincial levels, the responsible institutions lack implementation support causing missed opportunities across various subsectors.

7. **Despite an efficient regulator and an open licensing regime, the country is facing many forms of digital divides—in terms of access to connectivity, economic opportunities and digital skills.** There are 194 million cellular mobile subscribers and 124 million internet users. However, the vast majority rely on

\(^1\) Usage data are available on the Pakistan Citizen’s Portal website: https://citizenportal.gov.pk/.

\(^2\) International Labour Organization, ILOSTAT database. Data as of June 2022.


3G/4G connections for using the internet and fixed broadband penetration is only at about 2 percent of households, limiting data-intensive business and service delivery opportunities. Investments in fixed-line broadband are expected to continue at a slow pace only in affluent localities, which will further exacerbate geographic inequalities. Infrastructure sharing is limited, which results in higher capital and operating costs, further limiting network expansion. Foreign direct investment in the sector—which for nearly two decades was one of the bright spots in the economy—has also declined in the previous four years. Overlapping jurisdictions and disparate planning requirements at various levels of government related to right-of-way (RoW) permissions have also constrained and increased the cost of deployment of fixed broadband networks. Reforms for improving the policy and regulatory environment, as well as improving the capacity of key institutions in implementation of policies particularly for processing permissions for the RoW are much needed.

8. Regulatory reforms and investments are needed to improve the climate resilience of telecom and data infrastructure in Pakistan. The 2022 monsoon floods have demonstrated vulnerabilities in the connectivity infrastructure in Pakistan. The seasonal recurrence of the monsoon presents a looming threat to the data and connectivity infrastructure. There is a need to improve the critical connectivity infrastructure and develop a framework for the telecom sector to improve its response in climate-induced disasters.

9. The uptake of digital services is affected by limited or uneven digital literacy, limited use cases, local content, connectivity challenges and device affordability. Online schooling benefits a minority of pupils in a country where an estimated 22.8 million children do not participate in education. Digital infrastructure at educational facilities is very limited, in all, only 14 percent of government and 27 percent private schools have a functional computer lab. Even where computer labs exist, there is typically no high-speed connectivity to effectively use computers for learning.

10. Federal and provincial government agencies have started limited offering of digital services. These services vary in the degree of maturity and lack key elements such as interoperability, security by design, single sign-on, systematic integration with the identity database of NADRA, limited integration between federal and provincial IT systems and the absence of verifiable credentials means that transactions with the government remain costly and time-consuming for individuals and businesses. The currently siloed approach to the digitalization of services means that different provinces, despite offering similar services, are currently developing parallel IT systems instead of sharing resources to achieve economies of scale and transfer knowledge of successful digitalization.

11. Despite the presence of relatively strong national ID and payment systems the lack of interoperability frameworks and mechanisms has limited the capacity of the government (as well as non-government actors) to exchange data securely and seamlessly. Creating improved interoperability standards and mechanisms has the potential to create added value for better policy making especially during emergency response situations like the 2022 floods. Some key registries that could provide useful information to fine tune targeting are also not yet available digitally. Investments would unlock the power of data not just to strengthen the response to crises, but also to develop better quality and more innovative, efficient, and resilient services.

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12. **A sustained whole-of-government approach is needed to support effective digitalization of public service delivery.** Rules mandating technology and vendor neutrality, ensuring interoperability and common standards for digital government systems and infrastructure, and establishing clear institutional responsibilities, mandates, accountability, and enforcement powers, need to be established. This should include clear legal mandates to ensure that public services are provided in a consistent manner across government. Personal data should be collected in a transparent manner and only used for proportionate purposes to build trust and confidence. Cybersecurity efforts should be mainstreamed to ensure that digital government systems and data are safeguarded through the lifecycle of all digital infrastructure.

13. **A comprehensive stock-taking activity for mapping the complete inventory of all Registrations, Licenses, Certifications, & Other Permits (RLCOs) at all levels of government is required for undertaking reforms to enable the digital delivery of services to businesses.** The stock-take will enable finding the gaps and inconsistencies in the regulations for businesses and will enable the development of a roadmap for using information communication technologies to provide services to businesses more efficiently.

**C. Proposed Development Objective(s)**

**Development Objective**

The Project Development Objective (PDO) is to enhance the Government’s capacity for digitally enabled public services delivery for citizens and businesses.

**Key Results**

The proposed outcome indicators for the Project are as follows:

- Transactions on the National Data Exchange Layer (Number)
- Unique users on the National Citizen Services Portal (of which are female initiated) (Number and percentage)
- Registration, Licenses, Certificates and Other (RLCOs) transaction processed on the Pakistan Business Portal (of which processed for female-led small and medium enterprises) (Number and percentage)
- Users satisfied with services offered by the National Citizen Services Portal (percentage)

**D. Project Description**

**Component 1: Improving Digital Economy, Governance and Service Delivery Capabilities ($58 million)**

14. This component aims at building the capacity of the government to develop key digital public infrastructure and services supporting the country’s digital economy and society, in line with the 2018 Digital Pakistan Policy, which calls for the establishment of a holistic (government wide) enterprise architecture and the integration of government databases and systems through e-government service portals. Furthermore, the increased digitalization and investments made through the project to increase the capacity of data infrastructure will bolster the government’s resilience and adaptability in the face of potential shocks such as pandemics and recurring monsoon floods in the region. This will also help to improve the government’s response to climate-induced disasters, allowing for a more efficient deployment of emergency response and social safety programs.
Component 2: Pakistan Business Portal ($15 million)

15. This Component will support the Board of Investment (BoI) to modernize regulatory regimes in Pakistan at three levels of government: federal, provincial, and municipal. The first stage entails reviewing, mapping, and developing a catalogue of RLCOs across the three levels of the government, potentially including up to 800 government agencies relevant to dealing with investing and operating business in Pakistan. Key issues to be addressed include: simplification and consolidation of overly complex and fragmented business regulations across federal, provincial, and local jurisdictions; identifying and addressing regulatory overlaps and duplications; and initiating a sustainable drive to reduce excessive face-to-face government-to-business interactions. In the second stage, this Component will support a transition towards a digital inventory of administrative procedures and the development of an electronic single window—the Pakistan Business Portal (PBP)—integrated across all three layers of government for new and existing businesses to apply, renew, pay, and meet all their compliance needs online. The digitalization of regulatory compliance will follow the frameworks developed subcomponents 1.

Component 3. Project management. ($5 million)

16. This Component will finance the establishment and operation of one Project Management Unit (PMU) at the MoITT and four Project Implementation Units (PIUs) at NADRA, jointly at NITB and PITB, Ignite and BoI, which will be responsible for day-to-day Project administration, procurement, financial management, communications and outreach for each of their component(s) and/or subcomponent(s). Shared resources regarding safeguards oversight, monitoring and evaluation and reporting will be housed at the MoITT. This includes staff costs, equipment, facilities and incremental operating costs. The PMU and PIUs staff will be hired soon after Project launch. The detailed job description, qualification requirements, and selection procedure for the PMU and PIUs staff will be approved by a Project Steering Committee.

Component 4: Contingent Emergency Response Component ($0 million).

17. A Contingent Emergency Response component, with a starting financing of zero dollars, is included in the project design to allow for rapid reallocation of uncommitted credit/grant funds in the event of an eligible emergency or crisis during implementation.

<table>
<thead>
<tr>
<th>Legal Operational Policies</th>
<th>Triggered?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects on International Waterways OP 7.50</td>
<td>No</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP 7.60</td>
<td>No</td>
</tr>
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</table>

Summary of Assessment of Environmental and Social Risks and Impacts
The overall project is rated as Moderate in line with the Bank’s Environmental and Social Framework (ESF) and relevant Environmental and Social Standards (ESSs). The associated environmental risks of the project are assessed as Low. The project is structured around two main components with a third component to support project management through establishment of a PMU. All the project activities are ‘soft’ interventions (technical assistance, policy development, framework development, capacity building and standards development, etc.), which do not have any direct environmental impacts or associated direct risks. However, the implementation of the overall project activities will enhance the uptake of digitally-enabled services and can cause indirect environmental impact in terms of lower consumption of paper and a potential increase of e-waste. The associated risk of e-waste generation from the offices of implementing departments is also assessed as low since no major procurement of ICT equipment is part of the project. Furthermore, the current government practice involves reuse of ICT equipment within the departments due to limited resources. This reduces the potential of ICT equipment becoming e-waste over its useful cycle via reuse. For any residual e-waste generation impact, standard operating procedures (SOPs) for e-waste management will be developed as part of the project. Currently, there are no policy measures in place at national/provincial level to regulate and manage e-waste of the country. The project provides a very good opportunity for developing and streamlining both e-waste management policy and procedures that are currently lacking in the country. Another indirect environmental aspect relates with the rights-of-way reforms under Component 1. The Project will ensure that environmental aspects e.g., biodiversity/ecologically sensitive hotspots (protected areas, national parks) are properly considered during the development of criteria for rights-of-way in accordance with Bank guidelines for technical assistance.

The social risk rating of the project is Moderate. The foremost social risk is related with digital privacy and data protection, and misuse of sensitive personal data (e.g., biometrics, religion, ethnicity, gender, medical histories). Data protection issues will be addressed at the Project level by developing and strengthening data management practices, policies, rules and regulations at the agency level for each of the Project Implementing Agencies/Entities. Privacy-by-design features for digital privacy will also be considered. To guard against abuse of sensitive personal data, the project will incorporate good international practices for dealing with such data. Such measures may include, by way of example, data accuracy (correct or erase data that are not necessary or are inaccurate), use limitations (data are only used for legitimate and related purposes), data retention (retain data only for as long as they are necessary), informing data subjects of use and processing of data, and allowing data subjects the opportunity to correct information about them, etc. In practical terms, the project will ensure that these principles apply through assessments of existing or development of new data governance mechanisms and data standards for data sharing protocols, rules or regulations, revision of relevant regulations, training, sharing of global experience, unique identifiers, strengthening of information systems, etc.

Increased level of digitalization may also result in an increased risk of cyber-harassment, particularly targeted towards women, children, and minorities. Social exclusion is also a concern caused by barriers such as ineffective stakeholder identification and engagement, lack of coordination, interest, and understanding between relevant federal and provincial departments, gender mainstreaming gap during institutional structuring, affordability of services by marginalized groups, lack of digital awareness, gender norms, and elite capture. These issues will be addressed by developing a simple Social Management Framework (SMF) that will include measures to counter potential risks of cyber-bullying, selection criteria for trainees from gender and other perspectives, and general mitigations for above identified aspects. It will also include a Gender Action Plan to address gender inclusion and Gender-based,
Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH) aspects. SMF will also provide details on its implementation, monitoring, and reporting arrangements. The SMF will be prepared after project effectiveness and will be the responsibility of E&S Specialist and Gender Specialist hired by the PMU, once PMU is established. The World Bank will support the PMU E&S and Gender specialists for development of the SMF.

21. The development of policies and regulatory frameworks could have potential downstream impacts. ESS5 is not relevant as no land acquisition, physical or economic displacement, restrictions on land use and/or involuntary resettlement is envisaged under the Project. However, land related aspects will be considered when developing policies and framework for RoW, especially with respect to land fragmentation, informal settlers, and people effected by anti-encroachment drive. Simple labor management procedures will be developed to encompass concerns of direct workers to be hired by the implementing entities.

22. The SEA/SH risk of the project has been rated “Moderate” considering increased potential of online harassment and violence to women and girls, especially young women who will be trained to serve as agents for change to promote digital literacy. A SEA/SH Plan will be developed, as a part of SMF, with specific mitigation and response measures such as stakeholders' consultations and awareness on SEA/SH and online harassment, strengthening institutional mechanisms that aid in accessing grievance redressal. Gender and gender-based violence sensitization trainings of relevant government including enforcement agencies, including GRM staff, and other stakeholders will be conducted to enhance capacity of the client to address potential gender and SEA/SH concerns in the Project.

E. Implementation

Institutional and Implementation Arrangements

23. Overall implementation will be the responsibility of the PMU housed under the MoITT with shared resources including the Project Director, the Monitoring & Evaluation specialist and the Environmental and Social Specialist for the overall project. Component-specific PIUs will be established in each implementing agencies (NADRA, jointly NITB and PITB, Ignite and BoI). All activities will be conducted in close cooperation with the provincial IT Boards and Departments through the Project Steering Committee. A Project Operations Manual will be drafted and will include processes and procedures for implementing, monitoring and evaluating the project, ensuring compliance with the WB Policies as well as implementing the Grievance Redress Mechanism.

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