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# Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 19-Dec-2023 | Report No: PIDIA00384



**BASIC INFORMATION**

**A. Basic Project Data**

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Brazil	LATIN AMERICA AND CARIBBEAN	P180462	Espirito Santo Digital Acceleration Project
Financing Instrument	Estimated Appraisal Date	Estimated Approval Date	Practice Area (Lead)
Investment Project Financing (IPF)	19-Oct-2023	22-May-2024	Digital Development
Borrower(s)	Implementing Agency		
State of Espirito Santo	Secretaria de Estado da Ciência, Tecnologia, Inovação, Educação Profissional,		

Proposed Development Objective(s)

To strengthen the digital infrastructure resilience, to modernize emergency management, and to improve digital public infrastructure in the State of Espirito Santo.

**Components**

- Component 1: Resilient Data Infrastructure
- Component 2: Strengthening of Digital Public Infrastructure
- Component 3: Modernize Emergency Management System
- Component 4: Project Management

**PROJECT FINANCING DATA (US\$, Millions)**

**Maximizing Finance for Development**

Is this an MFD-Enabling Project (MFD-EP)?	No
Is this project Private Capital Enabling (PCE)?	Yes

**SUMMARY**

<b>Total Operation Cost</b>	<b>76.67</b>
<b>Total Financing</b>	<b>76.67</b>
<b>of which IBRD/IDA</b>	<b>61.22</b>



<b>Financing Gap</b>	<b>0.00</b>
<b>DETAILS</b>	
<b>World Bank Group Financing</b>	
International Bank for Reconstruction and Development (IBRD)	61.22
<b>Non-World Bank Group Financing</b>	
Counterpart Funding	15.46
Borrower/Recipient	15.46
Environmental And Social Risk Classification	
Moderate	
Decision	

## A. Introduction and Context

### Country Context

- After a strong rebound in 2021 and 2022 from the COVID-19 crisis, driven by the vaccination campaign and federal income support to the poor, growth in Brazil remained solid in Q1 2023.** Gross domestic product (GDP) grew 1.9 percent on a quarter-on-quarter basis in 2023, mainly driven by the strong growth in agriculture. On the demand side, household consumption and government consumption registered 0.2 percent and 0.3 percent growth, respectively, due to the fiscal stimulus and income transfer support, and despite the monetary tightening and higher families' indebtedness. CPI-inflation moderated to 3.2 percent in June 2023 from 12.1 percent in April 2022, falling within the inflation target interval (3.25 percent with a +/-1.5 tolerance interval). After the improvement observed in 2022, fiscal balances have shown signs of deterioration in 2023 as one-off revenues vanished and social transfers increased. The 12-month primary surplus of the public sector reached 0.4 percent of GDP in May 2023, from 1.3 percent of GDP in 2022.
- Poverty and inequality in Brazil are projected to have decreased in 2022. A stronger labor market and a major expansion of income transfer programs in terms of coverage (48 percent growth in 2022) and average benefits (170 percent growth in 2022) are expected to have led to a decline in the poverty rate from 28.4 percent in 2021 to 24.3 percent in 2022 (Poverty line = US\$6.85/day, 2017 purchasing power parity (PPP)).** Moreover, the overhaul of the flagship cash transfer program is estimated to have raised the income of the bottom 40 percent by 7 percent (2.2 percent annually) relative to its pre-pandemic level. Inequality, as measured by the Gini coefficient, is predicted to



have slightly dropped from 0.535 in 2019 to 0.523 in 2022. Further reductions in the poverty rate may occur if the economy recovers more quickly but remains volatile in the absence of stronger investments in human capital among the less well-off.

- 3. The State of Espírito Santo, while experiencing lower poverty rates than some Brazilian states, still faces economic disparities.** Brazil experienced a robust economic rebound in 2021 and 2022, driven by successful COVID-19 vaccination campaigns and income support measures, leading to a solid GDP growth of 1.9% in Q1 2023. Espírito Santo's GDP suffered a 4.4% decline in 2020 due to the pandemic but recovered quickly with a 7% growth in 2021. Poverty and extreme poverty rates in 2021 in the State were approximately 25% and 7.5%, respectively. Gender equality and digital gender gaps persist, particularly in rural areas.
- 4. Espírito Santo is grappling with the impacts of climate change,** deforestation, and land degradation, leading to reduced water availability, extended droughts, floods, and habitat loss. The State aims for green and inclusive growth post-pandemic, committing to net-zero CO2 emissions by 2050. In August 2021, the State Government of Espírito Santo announced plans for a State Climate Change Plan and a Strategic Plan for Emergency Actions, signaling a commitment to climate action.

#### Sectoral and Institutional Context

- 5. Brazil has a developed digital sector but faces urban-rural connectivity gaps.** Fixed broadband subscriptions are at 20.8 per 100 inhabitants, and mobile subscriptions are at 99.8 per 100 inhabitants nationally. Espírito Santo's connectivity levels are in line with the national levels, but efforts to expand high-speed fiber optic networks and promote open access to the PRODEST fiber network can expand coverage. Lack of digital skills is a major barrier to internet adoption in the state, with almost half of unconnected individuals citing a lack of skills as the primary reason. This poses challenges to Espírito Santo's digital transformation and exacerbates existing inequalities.
- 6. The Digital Public Infrastructure (DPI) of the State needs an upgrade to respond to new challenges and growing digital demands.** PRODEST, a public entity managing technology and communication solutions for government agencies in Espírito Santo, operates a Tier 3 data center in Vitoria, hosting state data and serving as a colocation facility. PRODEST's data center in Vitoria is critical for the state's digital services but operates close to its technical limit. High data usage and the absence of a backup facility pose significant risks to data security and service continuity, especially in the event of cyberattacks or natural disasters.
- 7. Brazil has made strides in providing digital services, ranking 16th in the OECD's digital government ranking.** The [gov.br](http://gov.br) portal centralizes federal government services, with widespread adoption and user accounts. State and municipal governments can integrate their public services with this platform. Espírito Santo faces challenges in leveraging digital transformation, ranking lower in digital service offerings compared to other states. Interoperability and data sharing are limited, with multiple portals causing user confusion and increased IT costs. The Government of Espírito Santo plans to digitize services, enhance digital authentication, improve interoperability, consolidate portals for better user access, and strengthen cybersecurity measures.
- 8. Furthermore, the State is in a need of further modernizing their emergency response system, a sector that has led the digital transformation in the state.** Today, the state's emergency center covers only 20 out of 78 municipalities



and faces infrastructure limitations. It operates with outdated software, necessitating an upgrade to provide more efficient and modern emergency services.

9. **Brazil has a robust regulatory framework for the telecom industry**, led by the Ministry of Communication (Minicom) and the National Telecommunications Agency (ANATEL). The Secretary of Science, Technology, Innovation, and Professional Education (SECTI) in Espírito Santo plays a crucial role in promoting research, technology, innovation, and education, contributing to economic growth and social inclusion. The public entity PRODEST serves as a key enabler of technology solutions for government agencies, supporting the state's digital development.

## B. Proposed Development Objective(s)

Development Objective(s) (From PAD)

To strengthen the digital infrastructure resilience, to modernize emergency management, and to improve digital public infrastructure in the State of Espírito Santo.

### Key Results

Achievement of the Project's results will be measured through the following PDO-level indicators:

- a. **Strengthen the digital infrastructure resilience:** Number of data centers built according to energy-efficiency standards;
- b. **Improve digital public infrastructure:** Number of individuals with a digital account in the new unique portal
  - Number of women with a digital account;
- c. **Modernize Emergency Management:** Number of municipalities attended by the CIDES maintaining actual levels of quality.

## C. Project Description

The project will comprise four components summarized as follows:

### Component 1: Resilient data infrastructure and digital skills

10. This component will strengthen the data infrastructure resiliency of Espírito Santo providing the State with a state-of-the-art publicly owned green data center. The increasing use of digital solutions and generation and usage of data requires the establishment of modern storage facilities that meet the appropriate cybersecurity standards and provide the storage and computing power required to analyze and obtain insights from those data. It also will provide training on digital skills together with the private sector to better equip individuals to adapt to the digital economy and strengthen the innovation and entrepreneurial ecosystem. The component will include: (i) technical assistance to define the data center's design and operations based on international guiding principles and standards; (ii) the construction of the green data center that will be owned and managed by PRODEST, which will help to increase the resiliency and redundancy of the existing data infrastructure in Espírito Santo while helping PRODEST to address a growing demand for data storage and computing services, (iii) digital skills trainings for



public sector workers and citizens to better equip individuals to adapt to the digital economy and online activities, (iv) an accelerator program that serves digital start-ups in order to support a better innovation ecosystem coordination and better service provision by the local public and private sectors.

### **Component 2: Strengthening of Digital Public Infrastructure (DPI)**

11. This component will finance the acquisition of hardware, software, and consulting services for the Secretary of Management and Human Resources (Secretaria de Gestão e Recursos Humanos, SEGER) to develop the unique portal of services of Espírito Santo. The project will support the State to expand access to digital services to individuals, businesses, and government by establishing an interoperability platform and a services portal. This component aims to enhance the resiliency and preparedness of the state’s community by providing individuals and businesses with resilient personalized end-to-end digital public services from all government entities in a single platform that ensures service access and continuity in case of climate events or disasters. This component will include: (i) financing software solutions to implement an interoperability platform, develop a unique portal that is integrated with gov.br, adopt solutions for online authentication and e-signature, and adopt AI solutions; (ii) financing energy efficient hardware to meet the technological demands of the services portal; and (iii) implementation of a software factory and consulting services oriented to developing software applications according to Government of Espírito Santos’ needs.

### **Component 3: Modernize Emergency Management System**

12. This component will support the expansion and modernization of the operational management processes of the emergency response and preparedness system in the State of Espírito Santo through the construction of the “Integrated Center for Social Defense (CIDES by its acronyms in Portuguese)” and the development and integration all the systems and procedures for the management of emergency calls. The construction of a new emergency center will allow the State to improve physical and technological infrastructure, enhance its response to crises, and respond to emergency calls from all 78 municipalities in the State (currently CIODES is responding to calls from just 25 municipalities), while allowing the integration of additional agencies, including SUMA 192. These technologies, together with the revision and enhancement of the response protocols and the creation of new protocols for rising uncategorized climate emergencies, will allow the State of Espírito Santo to offer advanced next generation emergency response services. The component will include: (i) the elaboration of final feasibility studies and bidding documents for the construction and operationalization of the Espírito Santo centralized emergency response system which includes the construction of the CIDES and the implementation of all the systems and procedures required; (ii) the design, building, and operationalize the CIDES; and (iii) the development and integration of all the systems and procedures for the management of emergency calls through the Integrated Emergency Response Platform (IERP).

### **Component 4. Project Management**

13. This component will provide support for the management and implementation of the project.

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Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

14. The key environmental risks and impacts expected from this project are related to the construction and operation of the Espírito Santo Integrated Social Defense Center (CIDES) and data center. Foreseen environmental risks and impacts from this project are expected to be mainly positive. Potential negative impacts will be limited to the site locations, temporary, reversible and can be controlled or mitigated by the adoption of standard GIIP as defined in the WBG EHSs.

15. An overall social risk is the lack of adequate stakeholder engagement as this project has all state citizens as beneficiaries as well as lack of access to a functioning grievance redress mechanism, and potential social exclusion of women , persons with disabilities, indigenous peoples and other members of vulnerable groups to Project benefits, especially due to the digital divide. The Project will not entail any land acquisition, resettlement, or associated livelihood impacts and is not expected to promote labor influx.

**E. Implementation**

**Institutional and Implementation Arrangements**

16. The Project Implementation Unit (PIU) will perform its work with its respective ‘partner agencies’ (beneficiaries and implementing partners) to guide implementation of specific activities and resolve any technical issues or related decision-making for implementation and supervision. Coordination arrangements will be set out in the Project Operational Manual (POM) with implementing agencies. The PIU will report to the Steering Committee (integrated by SECTI) overseeing the PIU, the implementing agencies and the Secretariat of Finance and Planning, the Secretariat of Transparency and Control and the Secretariat of Economy of the State of Espírito Santo, which will provide the function of oversight and supervision. The arrangements for the implementation of the project will be described in a decree approved by the Governor.

**CONTACT POINT**

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**Implementing Agencies**

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**APPROVAL**

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