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Report No: PAD3789

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED SCALE-UP FACILITY CREDIT
IN THE AMOUNT OF US\$140 MILLION

AND

A PROPOSED GLOBAL FINANCING FACILITY GRANT
IN THE AMOUNT OF US\$3 MILLION

TO THE
REPUBLIC OF MADAGASCAR

FOR A
DIGITAL GOVERNANCE AND IDENTIFICATION MANAGEMENT SYSTEM PROJECT

September 4, 2020

Governance Global Practice
Africa Eastern and Southern Region

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Exchange Rate Effective as of July 31, 2020
Currency Unit = Malagasy Ariary (MGA)
US\$1.00 = MGA 3,836.56

FISCAL YEAR
January 1 - December 31

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ABBREVIATIONS AND ACRONYMS

AFD	French Development Agency (<i>Agence Française de Développement</i>)
APA	Alternate Procurement Arrangements
ANRE	National Agency for the Implementation of e-Governance (<i>Agence Nationale de Réalisation de l'E-Gouvernance</i>)
API	Application Programming Interface
ARTEC	Communication Technology Regulation Authority (<i>Autorité de Régulation des Technologies de Communication</i>)
AWP	Annual Work Plan
BFM	Central Bank of Madagascar (<i>Banque Centrale de Madagascar</i>)
CA	Court of Account
CDO	Chief Digital Officer
CERC	Contingent Emergency Response Component
CERT	Computer Emergency Response Team
CIN	National Identity Card (<i>Carte d'Identité Nationale</i>)
CMIL	Malagasy Data and Freedom Committee (<i>Commission Malagasy sur l'Informatique et des Libertés</i>)
COVID-19	2019 novel coronavirus
CPF	Country Partnership Framework
COS	Steering Committee (<i>Comité d'Orientation et de Suivi</i>)
CRVS	Civil Registration and Vital Statistics
CSO	Civil Society Organization
DE4A	Digital Economy for Africa
DGU	Digital Governance Unit
DSI	IT Services Directorate (<i>Direction du Système d'Information</i>)
ESF	Environmental and Social Framework
ESCP	Environmental and Social Commitment Plan
ESS	Environmental and social standard
EU	European Union
FM	Financial Management
GBV	Gender-based violence
GDP	Gross Domestic Product
GFF	Global Financing Facility for Women, Children and Adolescents
GoM	Government of Madagascar
HEIS	Hands-on Enhanced Implementation Support
IAS/IFRS	International Accounting Standards
IBRD	International Bank for Reconstruction and Development
ICT	Information Communication Technology
IDA	International Development Association
IEM	Initiative for the Emergence of Madagascar (<i>Initiative pour l'Emergence de Madagascar</i>)
ID	Identification
ID4D	Identification for Development
ID-M	Identity-Management
IFC	International Finance Corporation

IFR	Interim Financial Reports
INSTAT	National Institute of Statistics (<i>Institut National de la Statistique</i>)
IPF	Investment Project Financing
ISA	International Standards of Auditing
IT	Information Technology
IVA	Independent Verification Agent
LG	Local Government
LMP	Labor Management Procedures
M&E	Monitoring and Evaluation
MID	Ministry of Interior and Decentralization (<i>Ministère de l'Intérieur et de la Décentralisation</i>)
NCIdb	National Civil Identification Database
NCRdb	National Civil Registry Database
NCRIC	National Civil Registry and Identification Center
NCSI	National Cyber Security Index
PAPSP	Public Sector Performance Project (<i>Projet d'Appui pour la Performance du Secteur Public</i>)
PBC	Performance Based Conditions
PCN	Project Concept Note
PDO	Project Development Objective
PEFA	Public Expenditure and Financial Accountability
PEM	Plan Emergence Madagascar
PFM	Public Financial Management
PIC	<i>Pole Intégré de Croissance</i>
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PPA	Project Preparation Advance
PPP	Public Private Partnerships
PPP	Purchasing Power Parity
PPSD	Project Procurement Strategy for Development
PREA	Government Efficiency Reform Program (<i>Programme de Réforme pour l'Efficacité de l'Administration</i>)
PRA	Prevention Resilience Allocation
PRODIGY	Digital Governance and Identification Management System Project
RBF	Result-Based Financing
SDG	Sustainable Development Goals
SEP	Stakeholders Engagement Plan
SME	Small and Medium Enterprises
SORT	Systematic Operations Risk-Rating Tool
STEP	Systematic Tracking of Exchanges in Procurement
ToR	Terms of Reference
UIN	Unique Identifier Number
UN	United Nations
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
USD	US Dollar
WB	World Bank
WEEEMF	Waste Electronic and Electrical Equipment Management Framework
WGI	Worldwide Governance Indicators



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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Madagascar	Digital Governance and Identification Management System Project- PRODIGY	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P169413	Investment Project Financing	Moderate

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input checked="" type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
29-Sep-2020	31-Dec-2024
Bank/IFC Collaboration	Joint Level
Yes	Historical Project/Activity implemented in sequence with an IFC activity(Loan/Credit/Guarantee/AAA)

Proposed Development Objective(s)

The Project Development Objective is to strengthen the Identity Management ("ID-M") system and government capacity to deliver services in Selected Sectors



Components

Component Name	Cost (US\$, millions)
Creation of a Consolidated and Interoperable Identity Management System	86.00
Digital and Mobile Government Services	52.00
Project Management and Implementation	5.00

Organizations

Borrower: Government of Madagascar

Implementing Agency: PRODIGY PIU

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	143.00
Total Financing	143.00
of which IBRD/IDA	140.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	140.00
IDA Credit	140.00

Non-World Bank Group Financing

Trust Funds	3.00
Global Financing Facility	3.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount



Madagascar	140.00	0.00	0.00	140.00
Scale-up Facility (SUF)	140.00	0.00	0.00	140.00
Total	140.00	0.00	0.00	140.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2020	2021	2022	2023	2024	2025
Annual	0.03	9.70	36.39	41.59	39.73	15.56
Cumulative	0.03	9.73	46.12	87.71	127.44	143.00

INSTITUTIONAL DATA

Practice Area (Lead)

Governance

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Moderate
6. Fiduciary	● Substantial
7. Environment and Social	● Moderate
8. Stakeholders	● Moderate
9. Other	● Substantial



10. Overall

● Moderate

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any waivers of Bank policies?

Yes No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).



Legal Covenants

Sections and Description

The Recipient shall, not later than one (1) month after the Effective Date, recruit a chief accountant, an accountant, an internal auditor, an identity management (ID-M) and civil registration specialist, a digital transformation specialist, and a contract management specialist, under terms of reference and with qualifications and experience acceptable to the Association.

(Schedule 2, Section I.A.5.(a) of the Financing Agreement)

Sections and Description

The Recipient shall, not later than two (2) months after the Effective Date, recruit a gender and communications specialist, under terms of reference and with qualifications and experience acceptable to the Association.

(Schedule 2, Section I.A.5.(b) of the Financing Agreement)

Sections and Description

The Recipient shall, not later than three (3) months after the Effective Date, procure, install, configure and thereafter maintain an adequate accounting system for the Project Implementation Unit and train its staff on the use of said system.

(Schedule 2, Section I.A.5.(c) of the Financing Agreement)

Sections and Description

The Recipient shall, not later than six (6) months after the Effective Date, recruit an external auditor for the first three Fiscal Years, under terms of reference and with qualifications and experience acceptable to the Association.

(Schedule 2, Section I.A.5.(d) of the Financing Agreement)

Sections and Description

The Recipient shall, not later than one (1) month after the Effective Date, prepare and adopt a Project Implementation Manual (PIM), in form and substance satisfactory to the Association, containing detailed guidelines and procedures for Project implementation, including with respect to: administration and coordination; monitoring and evaluation; financial management procedures, including detailed arrangements and procedures on budget, internal control, accounting, funds flow, internal audit, external audit; procurement and accounting procedures; contract management procedures; environmental and social safeguards; corruption and fraud mitigation measures; Verification Protocol; grievance redress mechanisms; roles and responsibilities for Project implementation; and such other arrangement and procedures as shall be require for the effective implementation of the Project.

(Schedule 2, Section I.B.1 of the Financing Agreement)

Sections and Description

The Recipient shall, not later than November 30 of each year, furnish the draft Annual Work Plan (AWP) for the following year to the Association for its review, except for the AWP for the Project for the first year of Project implementation, which shall be furnished not later than one (1) month after the Effective Date, and promptly thereafter finalize the draft AWP, taking into account the Association's comments thereon.

(Schedule 2, Section I.C.2 of the Financing Agreement)

Sections and Description

The Recipient shall furnish to the Association each Project Report not later than forty-five (45) days after the end of



each calendar quarter, covering the calendar quarter.
(Schedule 2, Section 2.1 of the Financing Agreement)

Sections and Description

The Recipient, through the Project Implementation Unit, shall:

- (a) carry out jointly with the Association, not later than twenty four (24) months, or such other period as may be agreed with the Association, after the Effective Date, a midterm review to assess the status of Project implementation, including as measured against the PBCs and the indicators referred to in Section 5.08(a) of the General Conditions. Such review shall include an assessment of the following: (i) overall progress in implementation; (ii) results of monitoring and evaluation activities; (iii) progress on procurement and disbursement; (iv) implementation arrangements; and (v) the need to make any adjustments to the Project and reallocate funds to improve performance;
- (b) to this end, prepare and furnish to the Association, not later than one (1) month before such review, a report, in scope and detail satisfactory to the Association and integrating the results of the monitoring and evaluation activities performed pursuant to Section 5.08(a) of the General Conditions, on the progress achieved in the carrying out of the Project during the period preceding the date of such report and setting out the measures recommended to ensure the efficient carrying out of the Project and the achievement of the objective thereof during the period following such date .

ch calendar quarter, covering the calendar quarter.
(Schedule 2, Section 2.2 of the Financing Agreement)

Conditions

Type	Description
Effectiveness	The Additional Condition of Effectiveness consists of the following: The Global Financing Facility (GFF) Grant Agreement has been duly executed and delivered, and all conditions precedent to its effectiveness, or to the right of the Recipient to make withdrawals under it, other than the effectiveness of this Agreement have been fulfilled. (Article V.5.01 of the Financing Agreement).
Effectiveness	The Grant Agreement shall not become effective until evidence satisfactory to the Bank has been furnished to the Bank that the Financing Agreement has been executed and delivered and all conditions precedent to its effectiveness (other than effectiveness of this Agreement) have been fulfilled. Except as the Recipient and the Bank shall otherwise agree, the Grant Agreement shall enter into effect on the date upon which the Bank dispatches to the Recipient notice of its acceptance of the evidence required pursuant to Section 5.01 (“Effective Date”). If, before the Effective Date, any event has occurred which would have entitled the Bank to suspend the right of the Recipient to make withdrawals from the Grant Account if this Agreement had been effective, the Bank may postpone the dispatch of the notice referred to in this Section



	until such event (or events) has (or have) ceased to exist. (Article IV, 4.01 and 4.02 of the Grant Agreement)
Type Disbursement	Description Notwithstanding the provisions of Schedule 2, Section III, Part A of the Financing Agreement, no withdrawal shall be made: (a) for payments made prior to the Signature Date; (b) on the basis of PBCs achieved prior to the Signature Date; and (c) in respect of Category (1) and (2) above, until and unless the Recipient has: (i) recruited a Verification Agency, in accordance with Section I.E.1(a) of Schedule 2 to the Financing Agreement; and (ii) furnished evidence satisfactory to the Association that said PBCs have been achieved, including the corresponding verification report(s) referred to in Section I.E.1 of Schedule 2 as prepared and approved by the Verification Agency and satisfactory to the Association. (Schedule 2, Section III, Part B.1 of the Financing Agreement)
Type Disbursement	Description Notwithstanding the provisions of Schedule 2, Section III, Part A of the Grant Agreement, no withdrawal shall be made for payments made prior to the Signature Date. (Schedule 2, Section III, Part B.1 of the Grant Agreement)



I. STRATEGIC CONTEXT

A. Country Context

- 1. Madagascar had recently embarked on a positive development trajectory with tangible social and economic gains:** The country's first peaceful and democratic transfer of power took place during the 2018 presidential elections and had shored up hope for long term stability. Economic growth had consistently improved during the last six years, with Gross Domestic Product (GDP) growth accelerating from 2.3 percent in 2013 to an estimated 5.2 percent in 2019. These achievements were underpinned by an ambitious economic reform program, aiming to attract private sector investments. They resulted in Madagascar climbing five spots on the 2018 Doing Business report within the space of a year, to reach the 162 out of 190 economies (no change in 2019)¹. Improvements were registered in particular with regards to starting a business, obtaining credit and enforcing contracts. The newly elected President, Andry Rajoelina, presented his overall program, "Madagascar's Emergence Initiative" (IEM), which is framed around three main pillars: (i) improving basic social services; (ii) strengthening governance and democracy; and (iii) promoting economic growth. Efforts have been deployed to reduce ministerial operational spending and improve efficiency through performance monitoring.
- 2. These gains have been upended by the 2019 Novel Coronavirus (COVID-19) outbreak, which was first detected in Madagascar in March 2020.** The number of detected COVID cases has accelerated since early May, reaching 10,748 as of July 30, 2020, while the peak is thought to have occurred mid-August in the capital. Global trade and travel disruptions as well as domestic containment measures are expected to result in the first recession since the 2009 crisis, with gross domestic product (GDP) predicted to contract by 1.2 percent in 2020 in the baseline scenario, compared to an estimated growth rate of 5.2 percent just prior to the coronavirus outbreak. Assuming successful containment measures, conditions are expected to stabilize in the second half of the year, with export sectors recovering in 2021 against the backdrop of a modest pickup in global demand, while domestic activity benefits from an ambitious infrastructure program. Under baseline assumptions, growth would recover to a subdued rate of 2.8 percent in 2021, about half the pre-COVID estimate. Overall, the effect of the coronavirus outbreak is expected to shave off about 9 percentage points to predicted GDP per capital levels over a two-year period.
- 3. The impacts of the crisis could reverse past progress in poverty reduction and deepen fragility.** Formal employment has been significantly impacted by contracting activity in tourism and manufacturing sectors, notably textiles and apparel, while revenues from informal jobs in large urban areas affected by lockdowns will be significantly reduced. A household survey conducted by the World Bank in June 2020 estimated that total employment contracted by 7.7 percent as a direct result of the crisis. In this context, extreme poverty (US\$1.90/day) is predicted to increase in 2020 to 76.8 percent, up from 74.5 percent in 2019, undoing three years of consecutive declines. Vulnerable populations in urban areas, notably women and youth, are particularly exposed to economic hardship and poverty traps, reflecting strict confinement measures. The economic and social impacts of the crisis remain highly uncertain in a rapidly evolving

¹ <https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2018-Full-Report.pdf>
Madagascar ranks 161st in the Doing Business 2019 report.



situation, with risks remaining largely tilted to the downside, including the possibility of social unrest or renewed political volatility. Madagascar has historically experienced cycles of political instability and has only recently completed a peaceful democratic transition.

4. This operation is part of a broader set of country program adjustments prompted by the COVID-19. Streamlining and digitalizing services, and improving the identification of citizens, can help provide quicker and more efficient services to the population and the private sector, and play a critical role to mitigate the effects of future health crisis as well as adapting to climate change. This is crucial given that the island nation is one of the countries in the world most exposed to disaster risk², regularly experiencing floods, droughts, and an average of three cyclones per year. These negatively affect growth and development on a regular basis. Digitalization of services can help provide continuity of essential and emergency public services when government offices are closed, and business activity and citizen mobility are limited. It can also help enhance public sector performance, accountability and transparency, while reducing leakages and corruption through automation. This is of particular importance where sudden and substantial inflow of aid, combined with slack financial controls, heighten the risks of mismanagement. Secure and centralized national civil registry and identification databases, interoperable with a national social registry for verification purposes, can help government rapidly identify and target the most vulnerable households for the distribution of emergency social safety nets, while reducing risks of “double-dipping” and misappropriation of funds. Furthermore, the self-declaration for access to cash transfers increases the risks of spreading the virus, due to the difficulty of enforcing physical distancing measures. Lastly, the civil registry data will ensure the production of timely key vital statistical information to support decision making and facilitate the response to sanitary or climate change-related crises.

B. Sectoral and Institutional Context

Overall Sectoral Context

5. Governance has been a longstanding constraint for the country to achieve a sustained, inclusive and high economic growth. Madagascar ranked at the 11th percentile for Government effectiveness on the 2019 Worldwide Governance Indicators³ (well below the Sub Saharan Africa average of 26th percentile). Effective service delivery in Madagascar has been thwarted by weak public sector efficiency, low revenue mobilization and corruption. Diminishing internal capacities can be attributed in part to poor human resource management, including lack of competitive recruitments and performance-based promotions. Leakages due to ineffective internal management systems further waste the Government’s already limited financial resources. Recent audits of the human resource and wage management systems, for example, estimate that ghost workers could make up between 10 to 20 percent of the payroll. A shortage of timely collection of data and statistics further impedes informed decision-making, as well as monitoring and evaluation of policy implementation and quality of service delivery. The World Bank Service Delivery Indicators illustrate the poor quality of service provision: for example, health facilities nationwide provided medical diagnostics

² The 2019 World Risk Report ranked Madagascar at 17 out of 171 countries in terms of risk to natural disasters. Madagascar also ranks as the 7th most affected country in 2017 considering indicators such as death toll and losses. <https://www.ireus.uni-stuttgart.de/Internationales/WorldRiskIndex/>

³ <https://info.worldbank.org/governance/wgi/>



accurately in only approximately 30 percent of cases on average in 2016⁴, while almost a third of school teachers were absent from classrooms in 2017⁵.

6. Accessing public services in Madagascar is also arduous, time-consuming, and often subject to corruption.

Almost all tasks, even the most menial, such as consulting opening hours of a public service, or requesting a simple government form, need to be carried out in-person. A two-tiered service delivery system has developed, with the wealthiest using social connections, bribes or employing intermediaries to speed up service delivery or gain access to the best quality services. The remainder of the population must travel long distances and/or queue for hours, receives substandard services even for the most basic procedure, and is often subjected to petty corruption. According to a 2019 Transparency International health survey, close to 40 percent of respondents indicated having paid bribes to receive adequate, improved or quicker health services⁶. Poor service delivery, corruption and red tape also affect businesses, leading to significant direct and indirect costs. In 2014, surveyed small and medium-size enterprises (SMEs) indicated paying on average 11 percent of their annual turnover in the form of bribes⁷. Many services involve lengthy and complex procedures: for example, requesting a construction permit currently involves 17 procedures and requires 194 days on average⁸. Discretionary power and lack of transparency on service delivery performance increase the opportunities for bribes at every step to speed up the process, and thereby increase inequalities in accessing public services.

7. The inefficient Identity Management (ID-M) system further entrenches exclusionary service delivery.

Close to a quarter of the population lacks documents to prove their legal identity, preventing them from accessing schooling, health services and, later in life banking, pensions, entitlement claims, and property transactions. These self-reinforcing constraints lift a sizeable barrier for unregistered populations to climb out of poverty. It also deprives citizens of basic rights such as voting and standing for elections, contributing to lower levels of government accountability and weakening the social contract between the state and its citizens. Madagascar's ID-M system is complex, fragmented, and prone to security risks and human errors. The key barriers to timely and universal birth registration are physical, economic, and sometimes cultural, particularly outside of Madagascar's urban centers⁹. The time and money involved in traveling medium to long distances, and providing various declarations and statements to register a child's birth and obtaining a National Identity Card (*Carte d'Identité Nationale*, CIN), constitute a significant opportunity cost, especially for rural populations. This creates a real barrier to unique, timely and secure identification. The destruction of records and difficulties accessing identification systems in the aftermath of a climate-change related natural disaster, further entrench the vulnerability of affected communities and can prevent them from accessing essential services.

⁴ Average share of correct diagnoses provided for five case study patients: (i) malaria with anemia; (ii) diarrhea with severe dehydration; (iii) pneumonia; (iv) pulmonary tuberculosis; (v) diabetes. (Source: World Bank Service Delivery Indicators <https://databank.worldbank.org/source/service-delivery-indicators>).

⁵ <http://documents.worldbank.org/curated/en/157201504768683955/pdf/119489-BRI-P160535-OUO-9-WB-SDI-Brief-Madagascar-EDU-FRN-FINAL.pdf>

⁶ https://www.transparency.mg/assets/uploads/download_manager/diagnostic.pdf

⁷ https://transparency.mg/assets/uploads/download_manager/rapport-caps-enquetes-dentreprise-web.pdf

⁸ World Bank Doing Business 2019 Indicators

⁹ They include: lack of familiarity with the civil registration process and its benefits, fear of authorities, cumbersome procedures requiring evidence that is sometimes difficult to obtain, difficulties accessing the registration agencies (distance to registration point), and indirect costs of registration.



8. There are significant opportunities for digital transformation in Madagascar. The country has a strong supply of software development talent, with around 500-600 skilled software engineers graduating per year, and a dynamic Information Communication and Technology (ICT) private sector that can be leveraged to provide digital services tailored to the population's needs. However, while Madagascar is often commended as having one of the fastest internet connections in the world¹⁰, the cost of mobile internet connectivity, at 40 percent of GDP per capita for 1 gigabyte (GB) in 2016,¹¹ remains prohibitive. Only 10 percent of the population is using internet, albeit up from 0.65 percent a decade ago¹². Sixty percent of the country is currently covered by a 3G or 4G network. Thanks to increased mobile phone coverage and decreasing communication costs, mobile phone usage has risen to 40 percent of the population, and about two-thirds of the population have access to a mobile phone. This provides significant opportunities for multimodal service delivery, which can target people with limited literacy and/or the most basic phones. Such opportunities are confirmed by the sharp uptake of the 3-2-1 toll-free automated hotline, which delivers information on a wide range of development topics. Service usage reached 7.6 million calls in 2018, and significant impacts were registered in terms of knowledge retention and behavior change, and closing knowledge gaps between lower and higher educated respondents, especially on health issues. Similarly, the use of the 910 and 913 hotlines providing information on COVID-19 peaked at 150,000 calls per day following the border closures, demonstrating citizens' demand for access to information.

9. The Government has yet to maximize such opportunities: its approach to digitalization is extremely fragmented, multimodal service delivery is nascent at best, and user-centered service design has not yet been adopted. Each Ministry, institution and sometimes department has its own Information Technology Services Directorate (DSI) and has designed and implemented its programs in silos. Systems are conceived in an ad-hoc manner as a response to one internal problem – rather than focused on end-user needs and economies of scale generated by interoperability of systems. The situation is exacerbated by fragmented and inadequate support from donors¹³. The Government still tends to procure large, costly, and ill-adapted technology services from international firms, with implications on technology ownership. There is no operating infrastructure for the interoperability of government datasets and systems across government. System interoperability, combined with the roll-out of a unique identifier number (UIN), would allow the application of the “once-only” principle to service delivery¹⁴, and the implementation of end-to-end digital services with secured authentication procedures. This would generate significant time and cost savings for all users, on both the front and back-ends, and reduce duplications, inefficiencies, and fraudulent enrolments to various benefits.

10. Lastly, the lack of data security and privacy enforcement is not conducive to developing trust in public and private digital services and creates risks to all users. Madagascar adopted cybersecurity and personal data protection laws in 2014, but regulatory, operational and institutional frameworks are still missing: the civilian Computer Emergency

¹⁰ Investments in fiber optics have resulted in Madagascar becoming the country with the second fastest broadband internet on the African continent after Ghana, and ranked 82nd out of 182 countries globally. <https://www.speedtest.net/global-index>

¹¹ ITU data.

¹² World Bank data.

¹³ A 2013 analysis concluded that 13 sub-systems of the FM system cohabitated within the Ministry of Finance, without any interoperability rules, preventing the emergence of a reliable and fluid PFM platform.

¹⁴ This principle ensures that citizens provide standard information and documentation to the government only once and eliminates duplicate functional registries.



Response Team (CERT) and data privacy agency (CMIL) have not yet been created for example. There is no government-wide policy on data ownership and usage, and no operational oversight authority guaranteeing data privacy. The technical and organizational measures on securing personal data in the 2018 Law of Civil Registration are not comprehensively implemented. Lack of training of public servants also increases the risks of massive data sweeps. As a result, Madagascar's digital government systems are amongst the most vulnerable in the world¹⁵.

Recent developments

11. The Government of Madagascar has announced high level commitment to civil registration and ID-M systems reforms, as well as digital transformation. On February 12, 2020, the council of Ministers confirmed the adoption of a high-level strategy to ensure universal access to civil registration, and the creation of an ID-M database which will feed into the digital governance strategy. The reforms will build on the 2017 National Strategy for Civil Registration reform, and the adoption of new legislation in 2019¹⁶, which calls for the creation of a National Civil Registry and Identification Center (NCRIC) to manage the central civil registry and national identification databases, which will be the foundation for the issuance of identity credentials. Following the onset of the COVID-19 crisis, the President of the Republic announced the creation of a population registry for all areas affected by the lockdown, to facilitate the distribution of social benefits.

12. The Presidency has created a Digital Governance Unit (DGU) to develop and coordinate the implementation of the national digital governance strategy¹⁷. The strategy is based on international best practice, including an agile and user-centric design approach. A highly skilled Chief Digital Officer (CDO) was recruited in December 2019 to lead the DGU. The Government is currently setting up the remaining team within the DGU, and the CDO has begun reviewing and supporting the development of various digital services¹⁸ based on international best practice.

13. A number of studies were undertaken to inform government strategies, as well as project preparation. The World Bank conducted an ID-M Systems Assessment, which helped inform the Government's 2018-2027 Civil Registration National Strategy, followed by a legal analysis. The Government has conducted a Services Assessment, and a Digital Maturity Assessment¹⁹ and Roadmap, which establish a baseline for digital maturity against which future progress can be measured, identify gaps and areas of potential development; and propose an action plan for digital government in Madagascar. As part of the Digital Economy for Africa (DE4A) initiative, the World Bank has also conducted a DE4A of Madagascar in 2019. A user needs assessments was carried out, using qualitative research and interviews of service users as well as people who work or interact with actual or likely users (e.g. Fokontany chefs and caseworkers), to begin informing the prioritization of services²⁰. Further user needs assessments will be carried out with

¹⁵ Madagascar ranks 98 out of 100 on the 2018 Cybersecurity Index 2018 (NCSI 2018)

¹⁶ Law #2018-027 governing civil registries

¹⁷ The digital governance strategy was presented by the Secretary General of the Presidency in October 2019.

¹⁸ These digital services are aligned with the PDO of the PAPSP. Additional services that are not related to this project will supported once the PRODIGY funds are available.

¹⁹ Based on the Harvard Kennedy School Maturity Model for Digital Services.

²⁰ The assessments aim to: i) document citizens' and businesses' usage of public services; ii) understand the most pressing issues in terms of public service delivery; and iii) identify which services should be prioritized for inclusion in project activities.



respect to civil registration and ID-M with Identification for Development (ID4D) financing, as soon as the movement restrictions are lifted. The US\$2.8 million Project Preparation Advance (PPA) is also used to conduct user needs research among frontline workers, focusing especially on the health and education sectors, to inform the design of telemedicine or remote programs for teachers for example.

C. Relevance to Higher Level Objectives

Adjustment to country program in response to the COVID-19 crisis

14. Under the relief phase, the World Bank is mobilizing numerous programs and instruments to support the Government's crisis response, and will require an additional US\$210 million in International Development Association (IDA) financing that was not anticipated under the World Bank Group Country Partnership Framework (CPF²¹). In addition to a Development Policy Financing (DPF), this phase of the response mobilizes resources from within the portfolio through activation of a Contingent Emergency Response Component (CERC) of the Improving Nutrition Outcomes using the Multiphase Programmatic Approach (P160848) and restructuring and scaling up of existing programs. So far, the World Bank has allocated US\$46 million to support the Government's health, social, education, water and sanitation plans, and plans to leverage an additional US\$123 million to finance the Multisectoral Emergency Plan through other CERCs. Support to the agricultural sector, including the rice sub-sector, will be provided through an Investment Project Financing (IPF) which will finance measures to increase agricultural productivity and food security. In total, IDA support for the relief phase will total US\$226 million. Most project resources reallocated and mobilized for pandemic response through activation of CERC components will be replenished through additional financing operations during FY21. New IDA lending for the Relief phase of pandemic response that was not planned in the CPF will amount to US\$210 million.

15. The Restructuring Phase is supported through US\$250 million in IDA financing, US\$32 million from the Global Partnership for Education (GPE) and US\$20 million from the Global Financing Facility (GFF). GPE support will come through an additional financing to the Basic Education Project and will assist the Government to implement its strategic plan in an effort to curb the spread of the pandemic and to ensure educational continuity at home during the pandemic-induced confinement period, prepare for reopening of post-containment classes and strengthen the resilience of the system in the face of, natural disasters, whether resulting from cyclones or the COVID-19 pandemic. A new Pandemic Preparedness Project of US\$120 million, including US\$20 million from the Global Financing Facility, will support Government's efforts to implement the recommendations of a recent assessment of the country global health security systems and further reinforce the country's capacity to respond to future pandemics of COVID-19 magnitude. Building on a strong track record in social protection, a planned US\$150 million Social Protection Project has been brought forward from FY23 to help build resilience to future shocks. Altogether, this Phase of the response adds US\$152 million in financing that was not anticipated in the CPF while reprioritizing and bringing forward US\$150 million from later years.

16. The Resilient Recovery Stage is supported by US\$450 million in IDA Financing. Of this amount, US\$350 million represents operations that will be delivered as planned in FY21 with adjustment in design as needed to make them

²¹ CPF for the period FY17-FY21, Report No. 114744-MG, May 30, 2017



COVID-19 resilient and take advantage of new opportunities to ensure a more sustainable, inclusive and resilient future in a world transformed by the pandemic. In addition, one project has been brought forward, the Madagascar Integrated Growth Poles and Corridor SOP-2 Project (P164536) which builds on a proven and successful Madagascar growth poles approach. This is part of a strongly complementary approach whereby the ongoing Growth Poles Project is being restructured to scale-up immediate support to the private sector during the COVID-19 crisis, with additional funds from the portfolio-level CERC, while the new proposed Growth Poles Project will provide significant support for the subsequent economic recovery, with an expanded sector and geographical coverage, and a focus on economic transformation including through digital entrepreneurship. Infrastructure related projects, a key pillar of the economic recovery, have been postponed until FY22 to accommodate the program changes outlined above.

17. The World Bank COVID-19 response is closely coordinated with the International Finance Corporation (IFC) response. In line with the Approach paper, IFC's strategy for the country will be delivered in 3 phases. Phase 1 – Rescue: IFC is supporting the Government's emergency response, with a focus on: (i) agriculture for livelihoods and jobs; (ii) light manufacturing for health response; and (iii) financial sector. Phase 2 - Restructuring: IFC will provide support through (i) restructuring assistance to the financial sector, corporates and key sectors; and (ii) advisory to the Government on private sector support. Phase 3 - Recovery: IFC will help mobilize private investment to drive solutions for key development challenges by (i) supporting the expansion of access to power, the development of sustainable railroad and port infrastructure; (ii) helping to build competitive global value chains; and (iii) leveraging digital platforms to support smallholder farmers and MSMEs. IFC has continued disbursing in the agribusiness sector (US\$3.3 million) in support of small holder farmers and has been deploying its available small and medium enterprise (SME) risk sharing facility (US\$6 million) with a systemic bank as a crisis response. It is also in negotiation with a systemic bank for a medium-term loan (US\$10 million). Furthermore, IFC is at different stages of discussing new financing and early disbursements for clients in the agriculture and financial sectors (for a total amount of US\$19.3 million).

18. The overall World Bank Group response, including this operation, is aligned with the Government's Multisectoral Emergency Plan as well as the activities of other development partners²². The World Bank is playing a critical role to further strengthen donor response. These efforts have paid off, resulting in a coordinated response on budget support measures. Similar efforts were carried out to rally donors around the response on health, social protection and private sector which are financed through a coalition of donors and leveraging the donor coordination platforms. The Multisectoral Emergency Plan supported by this operation has served as a platform for identifying priority needs and coordinating donor support.

19. Further adjustments to the country program in response to heightened fragility risks are also planned. Based on the number of conflict-related fatalities Madagascar experienced in 2019, the country meets the quantitative eligibility criteria for the Prevention and Resilience Allocation (PRA) under the IDA19 Fragility, Conflict, and Violence envelope. Management is preparing a Prevention Resilience Allocation (PRA) eligibility note that would be submitted to the Board in Q2 of FY21. This eligibility note will, among other things, clarify how the World Bank Group portfolio will be

²² Further detail can be found on the Madagascar Ministry of Economy and Finance website:

[http://www.mefb.gov.mg/assets/vendor/ckeditor/plugins/kcfinder/upload/files/Booklet%20des%20appuis%20des%20PTF%20mise%20%C3%A0%20jour%20du%2028%20juillet%202020%20Site%20web\(1\).pdf](http://www.mefb.gov.mg/assets/vendor/ckeditor/plugins/kcfinder/upload/files/Booklet%20des%20appuis%20des%20PTF%20mise%20%C3%A0%20jour%20du%2028%20juillet%202020%20Site%20web(1).pdf)



recalibrated to support the Government’s strategy to prevent further escalation of conflict/violence, and to directly address the pertinent drivers of conflict/violence.

Table 1: Adjustments to the CPF to Support COVID-19 Response

<i>Response Phase</i>	Portfolio Reallocations, incl. CERC	New/ unplanned Operations	CPF Operations Brought Forward	CPF operations adjusted but proceeding as planned	Total
<i>Relief</i>	136	90			226
<i>Restructuring</i>		152	150		302
<i>Resilient Recovery</i>			100	350	450

Sources: World Bank Group.

20. The operation is in line with the World Bank Group COVID-19 Crisis Response Approach Paper (June 1, 2020), across all the three response stages, but primarily supports resilient recovery. Concerning the relief stage, the PPA has been altered and is funding, for example²³, the development of a digital platform to support the Government’s monitoring of testing and tracing efforts. Concerning the restructuring stage, the project’s reforms on unique identifiers strengthens the pandemic readiness of Madagascar’s health system, as it bears a direct and positive impact on the governmental capacity to monitor key areas such as immunization and vital statistics. Finally, on resilient recovery, the project leverages contextual and digital opportunities to put forward reforms that build more inclusive, resilient and sustainable service delivery systems. These include, for instance, (i) supporting data interoperability solutions that enhances the government capacity to plan, target and monitor interventions ranging from cash transfers to health campaigns; (ii) increasing quality and coverage of service delivery, notably through telemedicine and tele-education efforts; (iii) streamlining and digitalization of services that lower financial and transaction costs to businesses, and (iv) strengthening public sector performance, accountability and transparency, while reducing leakages and corruption through automation and disclosure of government procedures.

Policy Context and Strategic Importance

21. The project is aligned with the objectives of the World Bank Group CPF for Madagascar for 2017-2021 (report number 114744-MG) and with the Government’s development plan, the “Initiative Emergence Madagascar” (IEM)²⁴. Overall, the CPF seeks to increase the resilience of the most vulnerable people and to promote inclusive growth, while strengthening national and local institutions to reduce fragility. The IEM also focuses on improving governance to support local service delivery. Case in point, there is a strong correlation between lack of access to the civil registry and poverty status. Legal identity is a prerequisite to access key public services, such as primary education for children, proof

²³ Another example of activity currently funded by the project PPA includes the pre-purchase of internet access for strategic government officials, thus ensuring the continuity of public services. These PPA-funded activities, beyond responding to urgent needs, offer relevant insights for approaches to be further scaled-up, ultimately strengthening government systems’ resilience (e.g. consolidated monitoring solutions, optimal models for government continuity during future pandemics).

²⁴ The COVID-19 response plan has yet to be adopted.



of residency, land property title/certificate, pension fund, etc. The President has highlighted his support to innovation and new technologies, including improving efficiency through the digitalization of public services.

22. The project will contribute to ongoing World Bank supported activities and engagement in Madagascar. By improving ID-M performance, the project will inform operations in sectors working on social benefits, such as social protection or universal access to health care. The project will also help to facilitate access to, and quality of, basic services through multimodal service delivery. The project will address shortcomings in other World Bank and donor operations with information technology (IT) components that face implementation difficulties, generate redundancies and interoperability challenges. It will strongly complement current private sector projects by contributing to enhanced business environment²⁵.

23. The project contributes to the implementation of the World Bank Digital Economy for Africa (DE4A) strategy, in support of the African Union’s Digital Transformation Strategy for Africa (2020-2030). The DE4A aims to ensure that every individual, business and government in Africa will be digitally enabled by 2030. The project focuses in particular on supporting the recommendations from the “Digital Platforms” pillar of the DE4A, as well as certain elements of the “Digital Skills” and “Digital Infrastructure” pillars²⁶.

24. The project will benefit from the Global Financing Facility²⁷ processes in Madagascar, aimed at strengthening the civil registration and vital statistics (CRVS) system as a data source for tracking and ultimately improving the health and well-being of women, children and adolescents. The government of Madagascar, under the leadership of the Ministry of Health, is developing an Investment Case (IC) to be implemented and monitored by a Government-led platform that brings together key stakeholders. It includes a component on Civil Registration and Vital Statistics (CRVS) that prioritizes improving the registration of births and deaths and recording of causes of death.

25. The project is aligned with the Sustainable Development Goals (SDGs) and the World Bank twin goals. It will directly contribute to the achievement of the SDG 16.9, which calls for the provision of legal identity, including universal birth registration for all by 2030. Universal civil registration (creating a record with a person’s biographical information) and civil identification (adding unique attributes to that person’s record in the form of a unique number, photo, signature, biometrics) are required for almost 70 of the 241 indicators for the 17 SDGs. The project will also contribute to achieving the goals of ending extreme poverty and promoting shared prosperity. Provision of legal identity contributes to the monitoring and achievement of other development goals, such as access to education and jobs, paving the way toward access to economic opportunities, economic growth, shared prosperity, and poverty reduction. In the same way, improved digital capacity and skills supported under the project will also contribute to improved access to jobs and economic opportunities.

²⁵ For example, through support to the digitalization of online business registration.

²⁶ Digital infrastructure, public and private platforms, skills, entrepreneurship and financial services.

²⁷ The Global Financing Facility for Women, Children and Adolescents (GFF) supports low- and lower-middle income countries to accelerate progress on reproductive, maternal, newborn, child and adolescent health and nutrition, and strengthen financing and health systems for universal health coverage.



II. PROJECT DESCRIPTION

26. The project adopts a results-based financing (RBF) approach, including the use of Performance Based Conditions (PBCs), to support efforts to strengthen sectoral governance, as well as adopt institutional and policy reforms requiring coordination across institutions that usually tend to work in silos. Sectoral reforms deemed to require an RBF under the Digital Governance and Identification Management System Project (PRODIGY) include: (i) the development and deployment of the UIN²⁸; (ii) providing the mandate and authority to data privacy and cybersecurity agencies; (iii) creating leverage to ensure digital services comply with the DGU service standards; and (iv) encouraging ministries and institutions to share information deployment of the UIN and make their databases interoperable. PBCs are designed in a way that generates commitment towards reforms implementation, as well as building sustainability of project's achievements. This comprises notably funding for the purchase of equipment and infrastructure for the ID-management system, as well as costs incurred to operationalize the National Civil Registration and Identification Center; DGU; National civilian CERT, and Data protection authority (CMIL). Mechanisms will be introduced to award additional funding to IT units that have made their services compliant to the DGU standards, made their databases interoperable or adopted the UIN.

27. Overall, 21 percent of the budget will be allocated to technical assistance (including capacity building), and the remainder to investments. Sixteen percent of the project will be disbursed against the achievement of PBCs.

A. Project Development Objective

PDO Statement

28. The Project Development Objective is to strengthen the Identity Management ("ID-M") system and government capacity to deliver services in Selected Sectors.

PDO Level Indicators

29. The main outcome of the project will be to increase access to key public services. The progress towards the PDO will be measured by the following indicators (the intermediate indicators are outlined in the results framework (section VIII)):

- **PDO 1:** Share of population with new identity credential comprising their UIN; and
- **PDO 2:** Users benefiting from services compliant with new service standards

²⁸ To date, individual communes as well as functional registers of diverse institutions use different identification numbers and will need to accept and align with the new UIN.



B. Project Components

30. The project's components are strongly interdependent. Component 1 focuses on creating an effective and secure ID-M system, notably through interoperable civil registry (CR) and national identity (ID) databases. This will provide the necessary infrastructure for the application of the “once-only” principle, and facilitate the regular reporting of vital events for demographic and vital statistics purposes²⁹, and strengthen the role of the health sector to contribute to timely registration of vital events. Component 2 supports the improvement of Government capacity to streamline and digitalize key services for citizens and businesses, including those that rely on CR and ID databases. The DGU, created with support from the project (Component 2) will oversee all aspects related to digitalization and technology in Component 1. This will ensure harmonization of the approach, improving the quality of services delivered and generating economies of scale. Roll out of services in both components will be accompanied, as required, by extensive training of central, local and traditional authorities, as well as awareness raising and communication campaigns³⁰. Change management will also be supported through the Project Management Component 3.

31. The project will contribute to increasing resilience to climate change by reducing the vulnerability of the ID-M system and selected public services to natural disasters. These will feature robust business continuity protocols for service interruptions that may result from climate-induced events. The project will also leverage infrastructure, including the cloud, to protect critical data, records, and electronic service delivery channels in the case of natural disasters or climate-related extreme events. In addition, IT investments' vulnerability will be addressed through proper installation in climate controlled and flood-safe locations.

²⁹ It can also inform other institutions, such as the Ministry of Interior (e.g. for passport), or the National Election Commission database, on a rolling basis, of individuals who reach voting age (18 years).

³⁰ Possibly in collaboration with agencies such as UNICEF with regards to civil registration and ID-M



Box 1. How the Project Supports Government COVID-19 Response, Recovery and Resilience to Future Crises

i. COVID-19 monitoring

Under the PPA, the project supports the implementation of the DGU. The DGU has created and is piloting a platform to monitor the COVID-19 situation and response. It converges all relevant databases from various institutions and is used by the COVID-19 Core Operational Committee to monitor testing and tracing efforts and inform decision-making on the Government's response to the pandemic. In the future, the development of these tools will also strengthen government capacity to monitor public health information and its preparedness to future potential public health crisis.

ii. Supporting Government continuity and developing services that reduce need for physical interaction

PPA funds have been used to finance connectivity of key project stakeholders, to support ongoing dialogue, project preparation and launch of PPA activities. The project will also support digitalization of back-end government services to ensure the continuity of critical activities, such as payment of civil servant salaries by enabling remote and contactless transactions. Using agile methodologies, the project will also support the rapid deployment of digital services to citizen and facilitate access to information. This will also contribute to improving the business environment, reduce costs of access for citizens, while enabling contactless delivery of public services. Through these activities, the project will also strengthen government's capacity to mitigate public service delivery disruption in context of crisis.

iii. Supporting and deploying solutions for frontline core service workers

The project will support the development of new solutions, including telemedicine for frontline health workers and tele-training for community teachers. These solutions will strengthen Government capacity to deliver health services across the country, strengthen resilience to potential public health crisis, and enable capacity to mitigate service disruptions in essential services such as health and education.

iv. Supporting digital transformation

Throughout the project implementation, the project will capitalize on the momentum resulting from the COVID - 19 outbreak to enhance digital transformation. It has been demonstrated that during the pandemic the Government is inclined to deploy effective remote services delivery, while deploying immediate process reengineering of key administration services.

Component 1: Creation of a consolidated and interoperable ID-M system (US\$83 million IDA Credit and US\$3 million GFF Grant)

32. This component seeks to address the shortfalls and inefficiencies of the current civil registry and ID-M systems. The objectives are to: (i) facilitate and secure access to civil registration services and legal identity for all citizens; and (ii) provide the institutional and technological underpinnings to support streamlined access to public services and benefits, as well as digital transformation efforts. The main beneficiaries of this component will be citizens, and stakeholders in



charge of civil registration and ID-M across the country, including the Ministry of Interior, Ministry of Justice, Local Government, Ministry of Health, Tribunals, Statistics Agency (INSTAT), and ministries and agencies relying on identity credentials for the provision of services or decision-making purposes.

Subcomponent 1.1: Institutional and administrative framework for inclusive access to legal identity (US\$17 million IDA Credit + US\$3 million GFF Grant)

33. This subcomponent seeks to implement the administrative, institutional and organizational framework supporting the modernization of civil registration and ID-M. The main objectives are to: (i) establish the NCRIC, responsible for managing the two National Civil Registry and Identification databases; (ii) define and implement streamlined, standardized and simplified civil registration and ID-M procedures for service delivery across the country, including remote areas and for all stakeholders (health centers, communes and civil registration centers, and central level); (iii) adopt and implement a UIN from birth and improved security of identity credentials; (iv) strengthen regulatory and legal framework for data security and protection of personal data; and (v) improve registration of population. Reforms will be informed by studies of behavioral change and civil registration user experience in order to remove barriers to timely registration of vital events.

Sub-subcomponent 1.1.1

34. This sub-subcomponent will support: (i) the rehabilitation, upgrading and refurbishment for the central and regional offices of the NCRIC, district, courts, ministries and other central and regional public entities involved in the civil registration process; (ii) acquisition of equipment; (iii) various technical assistance, intellectual and non-intellectual services supporting the reforms to the legal and regulatory framework, civil registration processes and administrative organization of all relevant stakeholders³¹, as well as the operationalization of the national center; (iv) technical assistance for communication, capacity building supporting the implementation of civil registration reforms, including development of training protocol and continued training for NRIC staff, local civil registrars, courts and individuals responsible for birth notification³² and (v) support to operating costs³³. The rehabilitation of public offices at communal level will follow newly adopted climate resilient standards³⁴.

Sub-subcomponent 1.1.2

35. Additional funding from the GFF will support specific activities related to the health sector, strengthening the administrative capacity of community health facilities and community health workers to provide timely and accurate notification of vital events (births and deaths) that take place in health facilities and in the communities. This will

³¹ The national center, civil registration actors: fokontany, communes, districts, courts, national prints and other civil registration stakeholders etc.,

³² Birth attendants, midwives, chefs de Fokontany, health center staff. Health professionals are responsible for filling out the notification forms that attests to the vital event, and are required to register a birth or a death.

³³ For civil registration there are 1695 communes, 6 boroughs (*arrondissements*), 119 districts, 41 lower court tribunal (*tribunal de première instance*), 21 consulates. For birth notification processes there are 3000+ health centers and 11000 Fokontany.

³⁴ This includes: (a) Decree No 2019-1957 of October 16, 2019 defining the national standard for the construction of disaster-resistant building; (b) Decree No 2019-1956 of October 16, 2019 specifying the procedures for obtaining construction permits.



contribute to improving the registration of these events, as well as improve the vital statistics system in Madagascar through streamlining the business processes of notification of vital events occurring in health facilities and communities; training and capacity building for health officials; and development and implementation of a digital notification system, linked to the National Civil Identification Database (NCIdb).

Subcomponent 1.2: Technological foundations for ID-M interoperability (US\$66 million IDA Credit)

36. This sub-component will support the modernization of civil registration and ID-M through the implementation of the systems and platforms required for the secure digitalization of civil registration and ID-M processes and records. The main objectives are to: (i) provide the foundations for improved digital Id verification and authentication for citizens to access services and benefits; (ii) digitalize the civil registration processes and records toward a consolidated national secured database of Id; and (iii) implement the foundational registers (ID and civil registration), basis upon which government digital platforms will be built and linked through the interoperability system.

Sub-subcomponent 1.2.1

37. The sub-subcomponent will support (i) on-demand package of services available to communes to support the acquisition of digital services and equipment³⁵, rehabilitation of offices and refurbishment for communes/civil registration offices and associated local services³⁶; (ii) the development, acquisition and implementation of a national civil registration digital platform, including the backend, front-end, databases³⁷ and interoperability protocols, security measures and secure record storage in line with the new Civil Registration law and best international practice; (iii) acquisition of equipment and services for the digitization of civil registration and Id archive records; (iv) development and implementation of a secure identity authentication system to be used as a pilot in priority services requiring ID authentication; (v) initiation of biometric enrollment for an upgraded national ID card in selected regions; (vi) the acquisition and implementation of systems and equipment and enrollment kits necessary to start the issuance of upgraded secured national identity cards for population over 18 years of age; and (vii) the issuance of Id credentials (civil registration documents and upgraded national identity cards).

38. Digitalization will be progressive and take a regional prioritization approach, based on existing infrastructure, complementarity with World Bank projects and social programs, and number of beneficiaries reached. The digital services and equipment packages will promote the use of renewable energy for communes located off-grid in remote areas. Pilot regions would include those regions where energy and social protections programs are active, allowing for the improved identification and inclusion of beneficiaries. Support will be provided in the form of technical assistance, and investments in IT services and equipment.

³⁵ These services will be centrally procured by the PIU and access will be determined based on criteria included in the project implementation manual. These services will be used for the acquisition of IT, electricity equipment and related services for internet connection and maintenance support

³⁶ Communes/civil registers, health centers (attached to communes), and Fokontany

³⁷ Design and implementation of the National Civil Registry Database (NCRdb) and NCIdb, that will securely store distinctive attributes to identify the individual, including a system to deliver UIN.

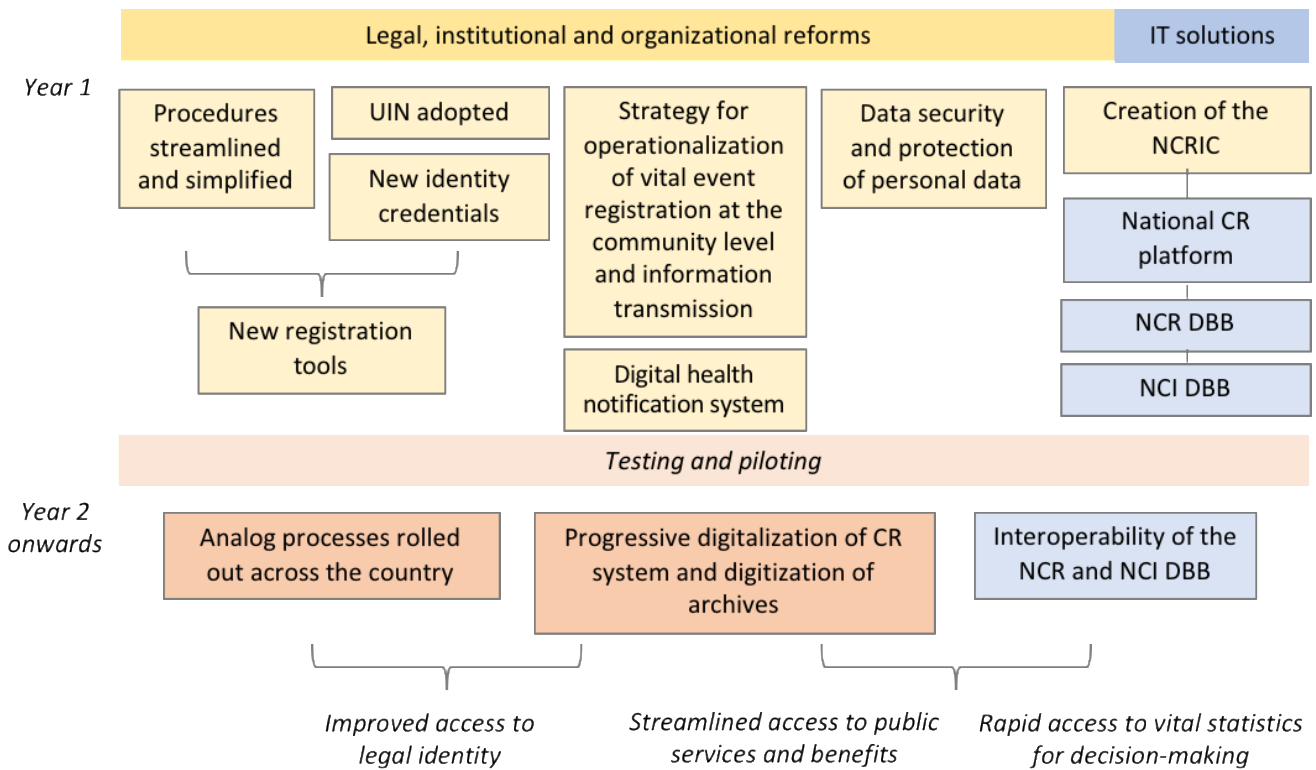


Sub-subcomponent 1.2.2

39. The sub-subcomponent will support the financing of specific project expenditures for development of systems and platforms for secure digitalization of civil registration and ID-M processes and records (PBC 1). Project expenditures will include: Civil Registration transfers to communes ; additional transfers to municipalities (*subvention complémentaire et d'investissement*) from year two onward ; operating cost of the NCRIC (including salaries and office supplies); and purchase of equipment for the MID and affiliate agencies (including the Ministry of Justice and affiliate agencies, Ministry of Health) incurred under the scope of programs pertaining to civil registry and the adoption of the UIN.

- **PBC 1:** Modernization of the ID-M system (US\$7.5 million IDA Credit). This PBC will incentivize the adoption of a UIN to be used government-wide, as well as the establishment of foundations for the integrated and interoperable ID-M system.

Figure 1: Sequencing of Activities and Reforms for Component 1



Component 2: Support to Digital and Mobile Government Services (US\$52 million IDA Credit)



40. This second component seeks to increase the offering, coverage and the quality of public services, by building the Government’s infrastructure and capacity to deliver public services that are faster, cheaper and better. The objectives are to: (i) strengthen the government’s capacity to streamline and to deliver public services through multiple channels (e.g. online, voice-based, offline), and (ii) provide the institutional and technological infrastructure (back-end and front-end) that supports service-delivery. Building internal capacity for digital service design and delivery will also help Government to be more reactive to new and pressing needs, as during the COVID-19 outbreak. The main beneficiaries of this component will be citizens and stakeholders in charge of service delivery, such as local governments, Ministry of Health and Ministry of Education.

Subcomponent 2.1: Improved digital governance framework, skills and infrastructure (back-end) (US\$22 million IDA Credit)

41. This sub-component will focus on the institutional and technological backend infrastructure required for effective service delivery. The objectives are to: i) strengthen the institutional capacity for multi-channel service delivery, ii) build the data and regulatory ecosystem which allows the application of the “once-only” principle across services, iii) develop the institutional framework and technological platforms that enable data exchange, digital access, payments, signatures and notifications, and iv) build the infrastructure for remote work and connectivity across central government units within and outside the capital. Drawing lessons from successful digital government reforms, the achievement of these objectives will be informed by principles that favor agile, modular and incremental technological development and acquisitions. The project will also continue supporting government capacity to work remotely and inform COVID-19 related decision-making, through the digitalization of key back-end services and the development of a COVID -19 monitoring platform. The project will explore the possibility of using renewable energy to power technological platforms to be developed under the project.

Sub-subcomponent 2.1.1

42. The sub-subcomponent will support the financing of project expenditures related to PBCs 2 to 5. These project expenditures will cover Government transfers to the national civilian CERT and cybersecurity organizations, the CMIL, and the DGU, to support their operating costs; purchase of equipment and services related to digital development; purchase of equipment of Ministry of Justice and other public institutions related to the implementation of data privacy policy; purchase of IT solutions to improve security among public institutions; cost of compliance with new standards of services (analog and digital) of public institutions; transfers to communes and communal services for education and health services.

- **PBC 2 – Establishment of institutional, legal and infrastructural foundations for digital transformation (US\$1.7 million IDA Credit):** Incentivizes the adoption of the regulatory and institutional framework of the DGU, the establishment of a single government domain, the authentication and verification system, as well as the financial sustainability of the unit.



- **PBC 3 – Implementation of institutional and policy frameworks for data privacy and protection (US\$1.7 million IDA Credit):** Incentivizes legal, regulatory and institutional reforms for the operationalization of the CMIL, as well as the delivery of key milestones.
- **PBC 4 – Implementation of institutional and policy frameworks for civilian cybersecurity (US\$1.6 million IDA Credit):** Incentivizes legal, regulatory and institutional reforms on cybersecurity; the operationalization of a civilian computer emergency response team (CERT); and delivery of key milestones.
- **PBC 5 – Systems that are compliant with DGU interoperability standards (number) (cumulative) (US\$10 million IDA Credit):** Incentivizes legal, regulatory and institutional reforms for the interoperability of government systems, as well as the conformity of various government systems with data interoperability requirements.

Sub-subcomponent 2.1.2

43. The sub-subcomponent will support: (i) technical assistance to strengthen capacity for coordination, design and implementation of backend systems for service delivery, (ii) technical assistance to support regulatory and institutional reforms on data protection, data privacy, cybersecurity and issues related to affordability³⁸, (iii) development and acquisition of hardware, middleware and software for core backend functions, notably interoperability, payments, signatures and notifications systems, (iii) funding of cloud infrastructure elements, notably hardware, virtualization, data storage and networking components, (iv) development and procurement of hardware, software, and data services required for remote work and secured connectivity across government entities, and (v) design and implementation of countrywide capacity building program for maintenance and upgrading of backend systems.

Subcomponent 2.2: Improve delivery of, and access to, user-centric digital government services (US\$30 million IDA Credit)

44. This sub-component will support the design and implementation of efficient digital and in-person services, with a focus on specific priority sectors, such as health and education, and digital services reducing physical interaction during the COVID-19 crisis. The objectives are to: i) strengthen the Government capacity to streamline and digitalize Government services, ii) improve the quality of actionable information provided to citizens and decision makers through multiple channels, iii) simplify and digitalize public service processes, increasing the quality and cost-effectiveness of digital and in-person services, and iv) reach the highest number of beneficiaries through low-connectivity solutions, such as voice-based telemedicine and tele-education.

45. This will be achieved through, among others, i) technical assistance to strengthen the government capacity to coordinate and deliver services according to agile and user-centric principles, (ii) software development and acquisition of hardware and data services for frontline service providers, iii) digitization and storage of existing paper-based information (e.g. registries, government forms), iv) centralized call-center infrastructure for voice-based services, including telemedicine and tele-education, vi) integration of information and services under single domain GOV.MG, vii)

³⁸ While services will be designed to ensure delivery through low-connectivity solutions (e.g. voice-based solutions), the project will provide TA to support improved internet affordability and accessibility. These include issues such as competition and use of the universal access funds.



design and implementation of multi-channel citizen feedback platform for performance assessment, and viii) nationwide capacity building program on digital skills for the delivery and sustainability of digital services, in partnership with local public and private universities, training centers and institutions.

46. The project will focus initially on services that have been prioritized and pre-selected with government for the first year³⁹. This includes: (i) telehealth, to improve access to health information and offer support to frontline health workers, including for the COVID-19 crisis; (ii) tele-education - providing remote support to teachers and aligned with ongoing efforts by the Ministry of Education supported by the World Bank⁴⁰; and (iii) multimodal requests for basic information on service delivery, via web, voice and text (opening hours, documents required, etc.). A mobile platform will gather feedback and track allocation of resources with frontline service providers (e.g. school transfers and educational material; medication and equipment for healthcare centers). This activity will be aligned with the nationwide census supported by the World Bank that, for the first time, will provide an exhaustive and geo-referenced database of teachers and community health workers nationwide. An early warning related to climate events through low-connectivity solutions could also be envisaged.

Component 3: Project management and implementation (US\$5 million IDA Credit)

47. The main objectives of this component are to reinforce project implementation capacity. The project will be managed by a dedicated Project Implementation Unit (PIU) within the Presidency, responsible for creating the necessary coordination for the timely and effective implementation of the project. The PIU will also be responsible for implementing a change management program to support the implementation of the project reforms and activities. This includes providing leadership training, study tours, and twinning arrangement with countries that are leaders in digital transformation, creating incentives within the administration to motivate and engage civil servants and obtain their buy-in into the digital transformation agenda. This subcomponent will support the operating costs and necessary investments related to project management and change management, including consultant recruitment, fiduciary, and Monitoring and Evaluation (M&E) management, provision of IT materials, office equipment and office rehabilitation work for the PIU.

Table 2: Breakdown of Financing by Component: Capacity Building, Investments and PBC

	Allocation (in US\$ million)	Share of overall project financing (%)
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³⁹ Prioritization is based on user needs research and the following prioritization criteria: service delivery quality; reach; inclusiveness; impact / public value creation; and facilitating conditions. Integrating some flexibility in the selection of services to be supported will also allow the project to adapt to the readiness of different ministries and public organizations, and to respond to the Government and the user’s evolving needs (for example during the COVID-19 crisis, or any future climate related crisis). Where solutions are partially supported by already existing World Bank project (e.g. register of social program beneficiaries), the project will provide specific assistance with regards to user-centricity techniques and technological requirements for optimal results.

⁴⁰ These activities – which may include the use of hotlines and multi-channel platforms – will be complementary to ongoing support that is provided by the *Madagascar Basic Education Support Project Additional Financing* (P172051). These activities, which fall under the coordination purview of the DGU, will privilege the use of shared platforms (e.g. voice, SMS, USSD) across services (education, health, identification) to ensure cost-effectiveness and sustainability.



	Technical Assistance (TA)		PBC	TOTAL (in US\$ million)	Technical Assistance (TA)		PBC	TOTAL
	Capacity Building	Investment			Capacity Building	Investment		
Component 1	16.00	62.50	7.50	86	11.19%	43.71%	5.24%	60.14%
1.1	8.00	12.00	0.00	20				
1.2	8.00	50.50	7.50	66				
Component 2	11.50	25.50	15.00	52	8.04%	17.83%	10.49%	36.36%
2.1	3.50	3.50	15.00	22				
2.2	8.00	22.00	0.00	30				
Component 3	2.50	2.50	0.00	5	1.75%	1.75%	0.00%	3.50%
TOTAL	30.00	90.50	22.50	143	20.98%	63.29%	15.73%	100.00%

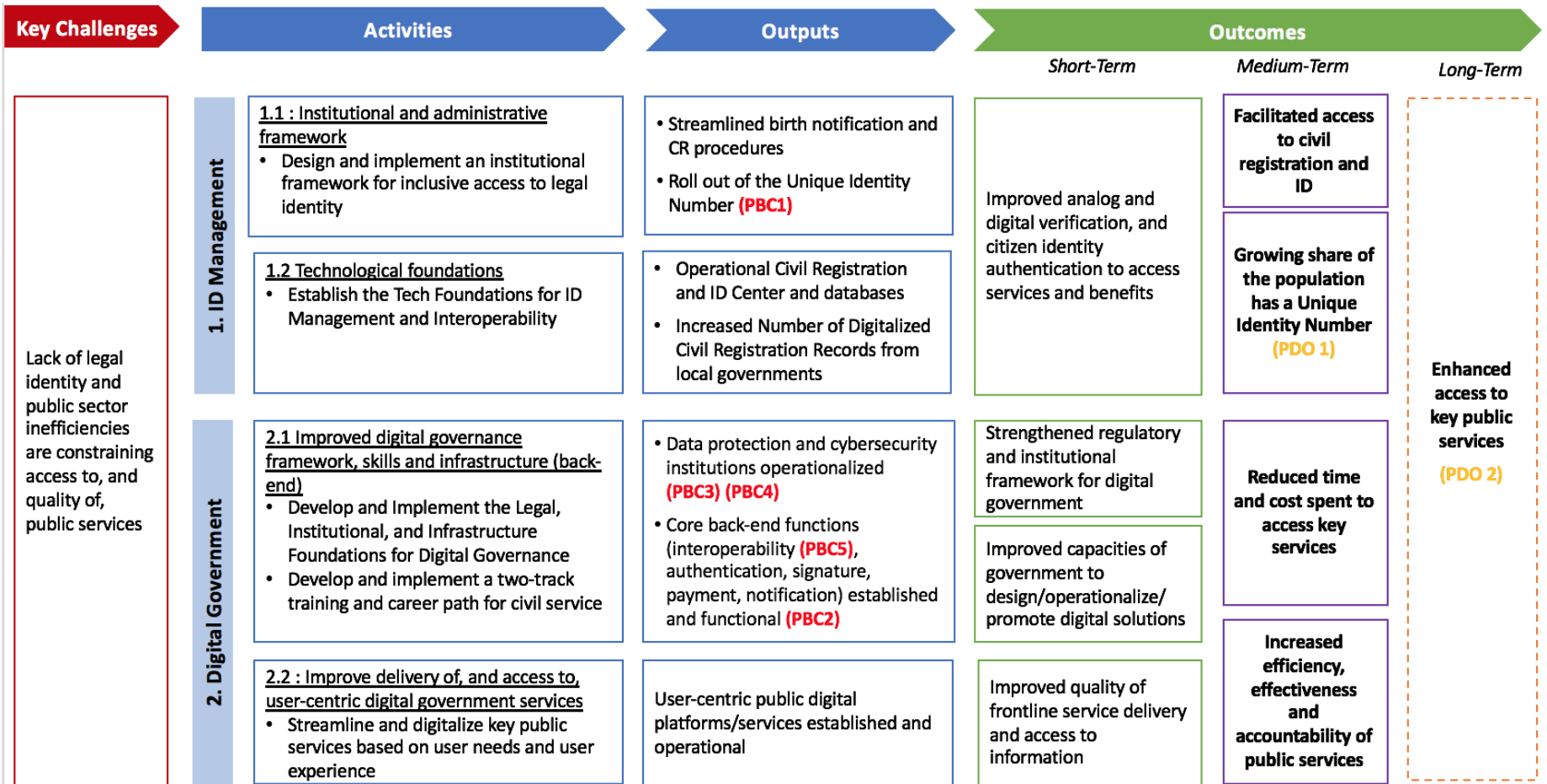
C. Project Beneficiaries

48. Primary beneficiaries include users of key public services and selected public and private institutions. Users include individuals and businesses that will benefit from improved access to administrative services, reduced transactions time and some decrease in petty corruption⁴¹. This will translate into time and monetary savings. Public and private institutions include (i) the DGU, which will receive technical assistance from the project, (ii) all public institutions benefitting from enhanced back-end systems and technical assistance⁴²; and (iii) public and private universities, training centers and learning institutions. Primary beneficiaries also include all civil servants and students receiving digital training. Secondary beneficiaries include public and private organization using the enhanced civil registry and ID database, downstream government agencies that will benefit from improved systems, universities collaborating with the project, and public and private sector agencies with a stake in the digital governance ecosystem.

D. Results Chain

⁴¹ Efforts will be taken to identify the needs of groups with particular difficulties in accessing the selected services and in making their voices heard in service delivery. This includes low-income groups; women in rural areas; illiterates; and disabled people.

⁴² These include institutions in charge of civil registration and ID-M across the country (including the Ministry of Interior, Local Governments and Tribunals), and any other organization responsible for the provision of services supported by the project or associated regulation.





E. Rationale for World Bank Involvement and Role of Partners

49. The World Bank is uniquely positioned to support government reforms to the ID-M system and digital transformation, as a result of its existing engagement with the Public Sector Performance Project (PAPSP, P150116)⁴³. The World Bank can use its convening power to ensure greater coherence among development partners on the digital transformation agenda and contribute to reducing fragmentation of donor support. The United Nations Children's Fund (UNICEF) is supporting civil registration, above all registration of births in Madagascar, whereas the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) has been supporting the use of IT in a small number of communes, both initiatives are complimentary to the objectives of PRODIGY. The European Union (EU), United States Agency for International Development (USAID), United Nations Development Program (UNDP), and *Agence Française de Développement* (AFD) are supporting, or have expressed an interest in supporting, the digital governance agenda. They have been agreed to align their approach by ensuring all initiatives are spearheaded by the DGU, to support greater harmonization and cohesiveness of the digital transformation agenda⁴⁴. The DGU is already in discussion with donors intervening in the digital sector and will be conducting a full mapping of their interventions to identify gaps and potentials for synergies.

F. Lessons Learned and Reflected in the Project Design

50. The operation reflects key lessons learned from project implementation, ID-M and digital governance reforms in Madagascar specifically, and from best practices around the world. This includes the establishment of effective institutional arrangements, and notably the creation of a dedicated Project Implementation Unit to support the implementation of the project, as well as a separate DGU. This unit will be responsible for the implementation of the digital transformation agenda, and will ensure strong cross-government coordination and harmonization even beyond the project duration⁴⁵. Training and capacity building will be provided early-on during project implementation to prevent any delays relating to the implementation of novel approaches and operational policies. This includes training on RBF, M&E requirements and disbursement management. The PAPSP project was the first RBF to be implemented in Madagascar, and although it has demonstrated promising results by ensuring a more result-orientated dialogue with the client, appropriation of the mechanism was lengthy and challenging. Indicators have been designed in close coordination with the client, and verification protocols and methodology will also be repeatedly discussed and designed to be as simple and clear as possible.

⁴³ The PAPSP has contributed to the revision of the civil registration law; the development of the national integrated tax information system; fostered collaboration across government institutions to pilot an interoperability platform; funded studies underlying the digital transformation agenda; and supported the establishment of key institutions such as the DGU.

⁴⁴ Most of these donors will however be focusing on inward-looking services, such as FM information systems, and human resource management system, while the World Bank will largely focus on citizen-centered services. These efforts will however be complimentary.

⁴⁵ The creation of such a unit is recognized as an international best practice and a common characteristic of all countries having successfully implemented their digital transformation agenda.



III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

51. The Project will be anchored within the Presidency Office and implemented by a dedicated PIU under the PREA Steering Committee (COS PREA), which will act as the dedicated Project Steering Committee, and help resolve issues that may require high-level coordination. It will integrate all high-level decision-makers representing each of the project stakeholders and beneficiaries, including the Ministry of Interior; Ministry of Economy and Finance; the Ministry of Telecommunication and Digital Governance; Ministry of Health; Ministry of Justice and other relevant stakeholders. Working groups may be created at the request of the Project Steering Committee to provide technical and strategic guidance as required. The PIU will work closely with the Program for Reform of the Efficiency of the Administration (PREA⁴⁶), which will take on a more strategic outlook⁴⁷. The PIU that will manage the PRODIGY and PAPSP projects has been created, and is being staffed with dedicated technical, management and fiduciary staff for PRODIGY. The PIU Coordinator will report directly and regularly to the Project Steering Committee, including on key performance indicators.

52. The DGU is the entity in charge of all digital transformation activities – within and outside the scope of PRODIGY. A Chief Digital Officer was recruited in December 2019 to lead the DGU⁴⁸. The DGU will work closely with the PIU, and will provide technical inputs regarding digital transformation, the choice of infrastructure and technology to ensure harmonization across all digital services (including beyond the scope of PRODIGY and World Bank financed projects), validation and quality assurance of digital services, and develop selected digital services. The operational budget for the DGU will progressively be drawn from the Government's budgetary resources. The project will initially finance the operational costs and core team salaries to ensure strong capabilities are in place to support rapid transformation of public services. Dependency on IDA financing will progressively be reduced, and technical assistance provided under the project will also include the development of a business model for the long-term sustainability of the DGU, which may include service fees or other mechanisms. The project will also support the development of a digital talent human resource strategy to support the optimization of resources, recruitment and retainment.⁴⁹ The Chief Digital Officer will regularly provide the COS PREA with progress reports on the implementation of the digital transformation strategy.

⁴⁶ *Programme de Réforme pour l'Efficacité de l'Administration*

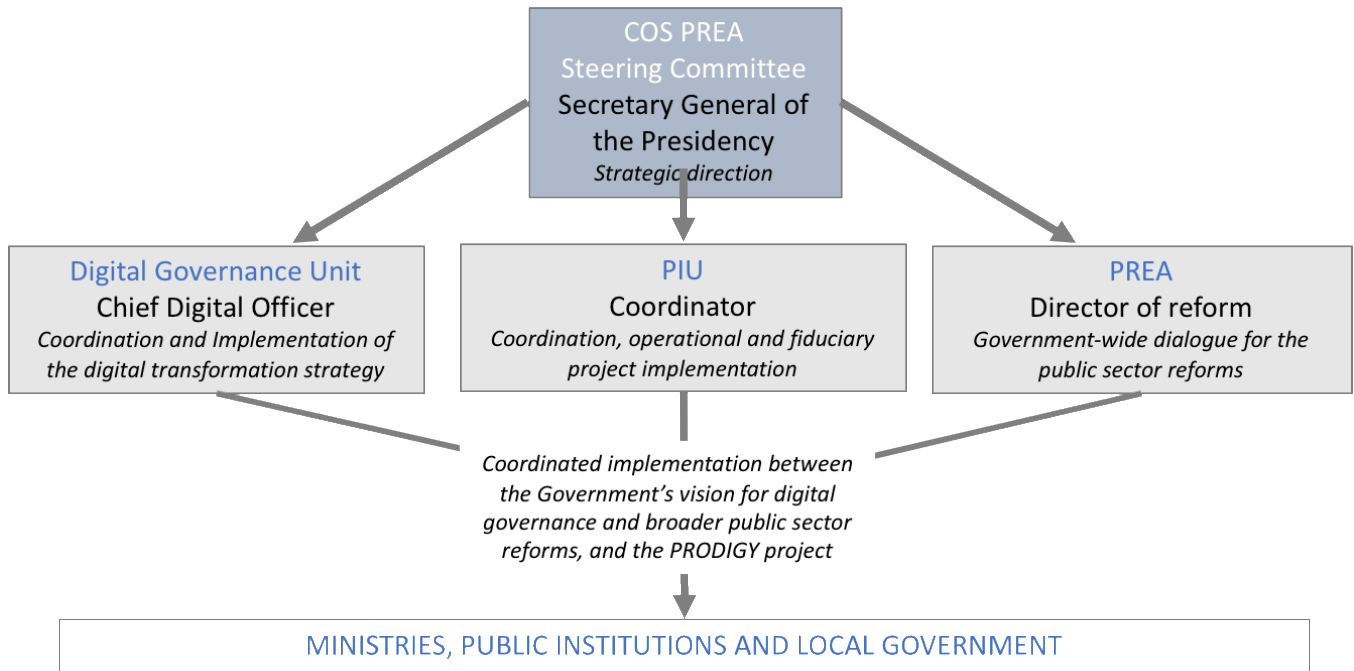
⁴⁷ The PREA had until recently managed the PAPSP project, as well as several other donor-financed governance projects (EU, AfDB). It is well positioned to support donor harmonization and dialogue with Ministries.

⁴⁸ Given the key nature of this recruitment to the success of the digital transformation agenda, technical assistance was provided for the process, to ensure the position was attractive and competitive with the private sector. The remainder of the DGU will also be largely recruited from the private sector.

⁴⁹ This will go beyond traditional one-time capacity building and establish long term programs in collaboration with local organizations providing these types of skills.



Figure 2: Implementation Arrangement Diagram⁵⁰



B. Results Monitoring and Evaluation Arrangements

53. The PIU will be responsible for project monitoring and evaluation activities, and will establish a strong performance management system, including through a citizen feedback mechanism. It will report regularly to the Project Steering Committee and the World Bank. The results framework summarizes the verification protocols of results to be achieved. Where appropriate, third party validations will be deployed to verify PBC results and assess performance of the intermediate results indicators in partnership with the Court of Account. The M&E system will incorporate mechanisms to monitor project implementation, compliance with the established procurement and financial management (FM) procedures, and achievement of project performance indicators. Monitoring instruments include bi-annual progress reports on project implementation, output and performance indicators, and targeted annual external assessment of compliance with PBCs.

C. Sustainability

54. The use of PBCs will support long term sustainability, by ensuring that sufficient funds are budgeted by Government for key institutions and the maintenance costs for infrastructure and operations for the ID-management system and digital services supported under the project. Sustainability studies will also be conducted to assess ways in

⁵⁰ These institutional arrangements were presented by the Secretary general of the Presidency during a PRODIGY workshop in June 2019 and approved by all Ministries represented by their respective Secretary Generals. It was also agreed during the project appraisal mission that the PREA would take the form of a permanent secretary for reforms.



which the Government can introduce innovative funding mechanisms to provide long term financing to newly developed or supported digital services, including through the identification of opportunities for fees for services and PPP models.

55. The proposed “all of Government” approach envisages integration of digital government infrastructure and services within a single platform that is designed for long-term shared use. This is expected to be more sustainable than investment in individual ministry-siloed information systems. The use of cloud-based solutions, for example, would help minimize the burden of technology upgrade/refresh for government that would otherwise be required in case of investment in extensive data center facilities. Other conditions to support sustainability of project investments include possible partnerships with industry and regional institutions to strengthen technical capacity in government and opportunities for shared infrastructure across the Indian Ocean region.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

56. Economic analysis. The Madagascar Digital Governance and Identity Management Project is expected to generate substantial benefits by introducing an ID-M system, establishing infrastructure to connect all civil registration and local tribunals nationwide with a single national office, digitizing formerly paper-based tasks, and simplifying administrative processes.

57. Benefits of the investments in creation of an ID-M system are expected to be substantial. Benefits come through five main channels: (a) time and cost savings to beneficiaries of registering a vital event and of applying for and obtaining a national identity card, (b) reduced administrative costs, (c) reduced fraud and corruption by increasing the security and traceability of transactions, (d) reduced costs of collecting demographic and vital statistics, and (e) other benefits, such as rights conferred as a result of legal identification, such as voting, opening a bank account, and accessing government services and benefits. Currently existing data allow only for calculation of benefits of the time and travel cost savings of applicants to the programs.

Reduced time and travel costs for applicants. Each year, about 660,000 births⁵¹ are registered (growing at a rate of 2.7 percent per year), about 138,500 deaths are registered, and about 500,000 people apply for a national identity card in the areas to be covered under the project (including those becoming newly eligible, and those who have been eligible, but have not yet applied).⁵² Applicants currently make an average of four trips to government offices, and spend an average of 16 hours, including travel time, to get information on documents required to register, to complete and submit documentation, to follow up, and to collect their official documents. By reducing the number of documents that applicants are required to submit and by digitizing back-office

⁵¹ Madagascar Multiple Indicator Cluster Survey data, UNICEF, 2018.

⁵² According to ID for Development ID4D-Findex data, 21.1 percent (3,288,380 people) living in Madagascar did not have a national ID card in 2018.



functions, an applicant is expected to make an average of two trips (saving an equivalent to US\$2.80) and to save eight hours (equivalent to US\$17.00).⁵³

58. A summary of the assumptions used, and findings is below.

- **Capital and maintenance costs.** The capital costs of the system (including foundational investments, studies, facilities, equipment, software, network, staff training, technical assistance and the like) is estimated to be US\$63 million. The annual cost for maintenance is estimated to be 20 percent of the capital cost over a period of ten years.
- **Discount rate.** A discount rate of 5 percent is used, in line with World Bank guidance.⁵⁴

59. The main assumptions underlying the analysis are: (a) installation period of one year; (b) benefits start to flow from year two and continue for ten years; and (c) the project covers 60 percent of the population at closing; and (d) applicants save an average of US\$19.80, considering both time and travel cost savings, as described above. Benefits exceed costs under all scenarios, as presented in the table below.

Table 3: Economic Analysis of the Time and Travel Cost Savings of Investments under the Project

	Net present value (US\$ million)	Internal rate of return (percent)
ID-M	104.1	31

The Project is expected to provide substantial benefits that cannot currently be quantified due to lack of data

60. **Reduced administrative costs.** By establishing the NCRIC to manage both the National Civil Registration and the National Identification databases and by putting in place architecture to connect all the civil registration offices and local tribunals nationwide with the databases, the project will eliminate the unnecessary duplication of IT systems, registries, and processes. By introducing an electronic means of tracking applications, processing payments, and other administrative tasks, the project is expected to significantly reduce administrative costs.⁵⁵ In addition, by creating shared service platforms and applications, promoting data exchange and authentication across government systems, the project will eliminate duplication of IT systems and processes, and thus significantly reduce administrative costs. In addition, the government is expected to save on operations and maintenance costs each year by relying on a centralized shared digital infrastructure, rather than having digital systems in individual ministries, agencies, and localities. Studies from other countries show that moving to a centralized shared digital system, governments can save from 20–30 percent in operations and maintenance costs. Improving the notification system on births and deaths between the health sector and civil registration services will contribute to timely registrations and improve the integrity of the system.

61. **Reduced costs of updating electoral lists.** More secure national ID cards will significantly reduce the costs of updating electoral lists, currently a cumbersome process costing an estimated US\$10 million per election, according to the Independent National Electoral Commission of Madagascar. About eight elections take place in Madagascar every

⁵³ Experience from similar projects in other countries show that investments in ICT technology and systems reduces the time and travel costs of users by 25–90 percent, according to a World Bank Program Profile on administrative simplification and service delivery. “Cutting red tape for Business and Citizen Services,” World Bank, Macroeconomics, Trade, and Investment, 2018.

⁵⁴ Technical Note on Discounting Costs and Benefits in Economic Analysis of World Bank Projects, World Bank, November 12, 2015.

⁵⁵ Studies of similar projects in other countries indicate that administrative costs can fall by up to 90 percent.



ten years, costing a total of about US\$80 million. If these costs could be reduced by half, the investments in ID-M would save the Government US\$24 million over ten years, assuming the project reaches 60 percent of the country's population.

62. Reduced losses from leakage and corruption. The digital platforms and systems will enable greater traceability and accountability of transactions, and thus ensure that transfers, such as cash payments, reach their intended beneficiaries or suppliers. In addition, the investments in technology for data exchange and ID verification and authentication and in e-procurement systems will reduce leakages of public resources through fraud and corruption.

63. Reduced costs of collecting demographic and vital statistics. The data generated through the collection of civil registration data will reduce the need to conduct specialized surveys to ascertain fertility and mortality patterns. Such information can serve as the basis for cohort studies and the construction of life tables. Having access to high-quality real-time information will also contribute to improved planning and evidence-based policy making, and ultimately in better allocation of public resources. Having access to up-to-date data from the civil registry may permit the government to undertake national censuses less frequently. This could lead to considerable savings for the government, as the last census completed in 2019 cost about US\$30 million.

64. Expanded services for people. With the ability to reliably prove their legal identity through digital technologies, citizens can gain easier secure access to basic services (opening a bank account, accessing social protection, healthcare, and education), strengthened capacity to exercise rights (for example, voting), and access to new economic opportunities (for example, formal employment, property rights, and trade in digital products and services). This is likely to lead to improved health and well-being, higher productivity, and the like. Moreover, user satisfaction with accessing services is expected to rise and citizen's trust to the government is expected to rise, due both to greater access to services and access to improved services arising from citizen feedback.

65. Expanded services for businesses. Businesses will be able to reduce their costs of obtaining information, registering a business, accessing land records, paying taxes, and the like. This is likely to facilitate trade, promote investment, and spur innovation. This in turn is expected to lead to greater productivity of firms and of the economy as a whole.

B. Fiduciary

(i) Financial Management

66. Overall, the FM arrangements that are to be applied in administering the Project are assessed as adequate (will meet the World Bank's minimum requirements under World Bank Policy and Directive) and FM residual risk is assessed as substantial. The assessment was conducted in the designated PIU under the *Programme de Réforme pour l'Efficacité de l'Administration - Steering Committee* (COS PREA⁵⁶). The substantial risk was mainly attributed to due to the PFM weaknesses particularly in budgeting, the challenges entailed by the operationalization of PBCs and project expenditures, the nature of activities and the high level of decentralization of the project activities.

⁵⁶ The PREA is anchored to the secretary general of the Presidency.



67. To further improve the project FM arrangements and to reduce the residual FM risk mitigating measures were agreed to at the appraisal. Specifically: (i) strengthen the budgeting capacity of the implementing agencies through training and use of simplified tools for the purpose of preparing the project annual work plan and budget, (ii) describing clear roles and responsibilities in the Project implementation manual (PIM) for the management of project funds, the planning and budgeting, the accounting and the reporting required from each stakeholder, the contract management, the internal audit; the allocation of assets to LGs and similar beneficiaries, along with robust safeguard and monitoring procedures of these assets, and comprehensive operational procedures related to the PBCs and project expenditures, (iii) make appropriate provision in the Government annual budget that will help the project expenditures financing as agreed in the project expenditures framework, and (iv) design clear project expenditures framework for each PBC settling appropriate information on the implementing agency/budget owner, the disbursement schedule, the accounting and the reporting requirements, the verification arrangements for each PBC.

(ii) Procurement

68. The procurement assessment revealed sufficient capacity and prior experience in managing World Bank funds by the expected PIU. However, the PIU has very limited experience on the New Procurement Framework and therefore the risk is substantial. The project will address these gaps by training their procurement officer and procurement assistant. The World Bank will provide coaching and continuous hands-on support to the PRODIGY PIU.

69. Procurement under the proposed operation will be guided by two documents: (i) the World Bank's New Procurement Framework, the procedures specified in the 'World Bank Procurement Regulations for IPF Borrowers' dated July 1, 2016, (Procurement Regulations) updated in August 2018; and (ii) the World Bank's Anti-Corruption Guidelines: 'Guidelines on Preventing and Combatting Fraud and Corruption' revised as of July 1, 2016, as well as provisions stipulated in the Financing Agreement. During its implementation, the project will draft a manual based on and in accordance with these above-mentioned references.

70. All goods and non-consulting services will be procured in accordance with the requirements set forth or referred to in 'Section VI. Approved Selection Methods: Goods, Works and Non-Consulting Services of the Procurement Regulations' above mentioned, and the consulting services will be procured in accordance with the requirements set forth or referred to in 'Section VII. Approved Selection Methods: Consulting Services of the Procurement Regulations', as well as according to the Project Procurement Strategy for Development (PPSD) and the Procurement Plan approved by the World Bank.

71. During appraisal, a Project Procurement Strategy for Development (PPSD) was elaborated with the participation of the Implementing Agency and the technical Ministries and, at the end, an acceptable Procurement Plan covering the first 18-months of project implementation was submitted and approved. World Bank procurement rules and procedures will be applied. The Procurement Plan specifies for each contract: (a) a brief description of the activities/contracts; (b) the selection methods to be applied; (c) the estimated cost; (d) time schedules; (e) the World Bank's review requirements; and (f) any other relevant procurement information. Any updates of the Procurement Plan and the PSD



shall be submitted for World Bank’s approval. Continuous monitoring and mitigation of any potential risk will be made possible through regular reporting on the progress and implementation of fiduciary activities, regular supervision, and further capacity-building, as necessary. Finally, the World Bank 's Procurement team will provide additional support and/or training for the implementation of the project.

72. All procurement activities financed by this fund will use the World Bank’s online procurement planning and tracking tools, Systematic Tracking of Exchanges in Procurement (STEP), to prepare, clear, and update its Procurement Plan and to carry out all procurement transactions.

73. **Madagascar’s national procurement procedures are widely used for local World Bank financed projects.** The Borrower agreement will include the obligation of suppliers to respect the World Bank’s Anti-Corruption guidelines (art 4- III of the national Code) and the right for World Bank audits. Other elements of paragraph 5.4 of the Procurement Regulations for World Bank Borrowers are already under implementation by the Borrower. However, in accordance with paragraph 5.6, it is not evident that the quality of procurement is taken into account. To ensure compliance with the Procurement Regulations for IPF Borrowers, assistance from World Bank is therefore forecasted during implementation, including through training and procurement clinics.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

74. **In line with the World Bank Environmental and Social Framework (ESF), the environmental and social risk classification for the project is moderate.** It is expected that the project activities will have strong positive social impacts by guaranteeing the access of many people to digital governance. Five Environmental and social standard (ESSs) are relevant for the project: ESS1 Assessment and Management of Environmental and Social Risks and Impacts; ESS2 Labor and Working Conditions; ESS3 Resource Efficiency and Pollution Prevention and Management; ESS4 Community Health and Safety; ESS10 Stakeholder Engagement and Information Disclosure. The potential adverse social risks and impacts are not likely to be significant. Indeed, no adverse social risks or impacts related to land access, community health & safety or cultural heritage have been identified for the project. The project may, however, deal with potential labor conditions and sexual harassment and intimidation risks amongst employees mainly related to the mobilization of consultants, civil servants and other contractors by the project, as well as the increased training for women in digital skills. The introduction of digital governance could potentially lead to a greater risk in the security and confidentiality of personal data collected, possible cases of elite capture, greater misunderstanding by the public facing the proliferation of these new management tools, and larger digital divide among various segments of society (different government



units, regions, rural and urban areas, and between populations with access to the Internet and those without, especially the vulnerable groups and people in remote areas). The project as currently presented does not yet provide enough information on the type of targeted vulnerable group, in accordance with the PDO. Therefore, this highlights the need to ensure that the maximum of, if not all, vulnerable groups (such as persons with disabilities, gender/sexual minorities, ethnic minorities, people living in remote or isolated areas, etc..) will be involved and will benefit from the project in order to ensure the principle of inclusion and non-discrimination.

75. Social safeguard tools are available⁵⁷. The project prepared an Environmental and Social Commitment Plan (ESCP) which provides measures and actions to comply with the ESF⁵⁸. Also, an initial Stakeholders Engagement Plan (SEP), Labor Management Procedures (LMP), developed a draft of Waste Electronic and Electrical Equipment Management Framework elaborated and the project will use the existing Grievance Mechanism developed for the current Public Sector Performance Project (P150116). The project will reinforce the grievance mechanism already in place for the PAPSP project, whose PIU is PREA as well. The ESCP, SEP, LMP, and WEEEMF were disclosed before the appraisal, both in country and in World Bank websites.

76. GBV prevention. The Gender-based violence (GBV) risk for the project was assessed as Moderate. However, the project will pay attention to prevent and address possible GBV because of potential labor conditions and sexual harassment and intimidation risks amongst employees mainly related to the mobilization of consultants, civil servants and other contractors by the project, as well as the training of women in digital skills. Measures to address these challenges include: (a) a requirement that the borrower includes clauses on workers' conditions and management, child protection, and GBV prevention in all contracts; (b) provision of technical assistance and training to the borrower and awareness raising on GBV among all contractors, workers; (c) encouragement of the inclusion of female trainers in digital skills for women; and (d) the setup of an accessible and accountable Grievance Redress Mechanism (GRM) to ensure that any incident related to workers and GBV will be addressed in an effective manner with sufficient social sensibility. The Project Implementation Manual will be updated twelve months following project effectiveness to also cover GBV issues

77. Citizen Engagement. The project is expected to reinforce citizen engagement and will ensure that related mechanisms in place are inclusive: (i) the project has a citizen engagement indicator, which will track user satisfaction and feedback on services supported by the project; and (iii) the project will reinforce and implement the GRM to strengthen project governance.

⁵⁷ The Stakeholder Engagement Plan (SEP), Labor Management Plan (LMP and Electronic and Electric Waste Management Plan (EEWMP) were submitted to the Association and approved prior to Project appraisal, and disclosed both on the World Bank website on June 17, 2020, and on the PREA and PRODIGY websites on June 16, 2020:

<http://prea-mg.com/publication/#tab-1592287595892-3-9>

<https://digital.gov.mg/2020/06/16/publication-generale-de-textes-regissant-le-projet-prodigy/>

⁵⁸ The negotiated ESCP was disclosed both on the World Bank website and on the PREA and PRODIGY websites on August 27, 2020 :

<http://prea-mg.com/publication/#tab-1592287595892-3-9>

<http://digital.gov.mg/2020/06/16/publication-generale-de-textes-regissant-le-projet-prodigy/>



78. Gender. The project will contribute in reinforcing women's access to public services and economic opportunities through improved access to legal identity and civil registration services under Component 1. The project will also strengthen women's participation in economic life through improved digital skills under Component 2. The project has included specific indicators to track (i) the percentage of women who receive identity credentials, as well as (ii) the number of women who receive standards compliant IT training through the project.

79. Climate change co-benefits. The project will help vulnerable populations benefit from key public services following shocks, including climate-induced ones (e.g. tropical cyclones or floods), by providing them with access to identity credentials. The project design is also informed by climate change impacts and vulnerabilities, in particular with regards to infrastructure. Rehabilitation of public offices at communal level will follow newly adopted climate resilient standards, and IT infrastructures and equipment will be secured, and data recovery and backup will be in place, in the event of climate-related natural disasters. In addition, the project will introduce guidelines to integrate energy efficiency cost-savings and GHG emissions standards for procurement and investment planning.

80. Public Consultation and Information Disclosure. The project will develop a communication strategy on safeguards aspects within four months following the project effectiveness to share information related to the project by informing the public about the project's objectives, activity, expected impact and results. The strategy and tools will be tailored according to the targeted audiences (project beneficiaries, civil society organizations, private sector, academia, parliament and government institutions involved), with special consideration to bridge the digital divide between rural and urban.

81. Environmental and Social Capacity for safeguard implementation: The Environmental and Social safeguard specialist of the PIU is recruited. The ESCP provides for the implementation of actions (training, exchanges) to build environmental and social capacity of the project stakeholders.

82. Resource implementation. Sufficient budget, as well as clear institutional responsibilities have been prepared for the implementation of measures related to ESF implementation.

V. GRIEVANCE REDRESS SERVICES

83. Communities and individuals who believe that they are adversely affected by a World Bank supported project may submit complaints to existing project-level grievance redress mechanisms or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and World Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit



<http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>.

For

information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

84. The overall project implementation risk is rated as Moderate, given Madagascar's volatile political and economic situation, substantial procurement-related risks, the disruptive nature of reforms at national and local levels on the current status quo, the risk of political interference considering the investment to be undertaken, and the technical challenges faced by the project due to weak fiduciary and human resources capacity.

85. Political and Governance. Madagascar has been prone to instability and repeated political crises since independence, the last of which took place between 2009 and 2014. According to a June 2013 World Bank analysis⁵⁹, the cumulative cost of this latest crisis exceeded US\$8 billion⁶⁰. These crises have taken a heavy toll on the country's economy and its people, especially the most vulnerable, but also weakened public institutions and governance systems. Although Madagascar experienced its first democratic and peaceful transition of power in 2019, signaling a positive outlook for the future, deeply imbedded structural fragility and popular grievances could form the bedrock of new political crises. Accountability and transparency are low. In addition, Madagascar has historically suffered from significant institutional instability, leading to frequent changes in government counterparts at both political and technical levels. This leads to a stop-and-start political dialogue which may induce delays in project approval and implementation. The nature of the proposed reforms may also draw resistance from existing vested interests, especially among civil servants that may perceive simplification, automation and in-house development as reducing opportunities for corruption. These risks will be mitigated through high-level leadership, the adoption of a change management approach, a citizen feedback arrangement that can help pinpoint poor performance and corruption, and by establishing a strong PIU that is able to weather political instability. The risk rating is *Substantial*.

86. Fiduciary. The FM and procurement assessment carried out revealed limited capacity and little prior experience in managing World Bank supported projects. While current governance projects experienced fiduciary challenges, the learning process has generally been fast for fiduciary teams to maintain compliance with World Bank standards and procedures. Additional management and fiduciary staffs dedicated to the project are being recruited. Additional fiduciary trainings as well as regular World Bank supervision will be undertaken throughout project implementation. The risk rating is *Substantial*.

Other risks. The potential impact of the COVID-19 crisis on the operation is considered *Substantial*. Government expenditures are likely to be unpredictable given the emergency situation and possible evolving expenditure needs. The crisis could also lead to temporary suspensions of parliamentary sessions, unavailability of key stakeholders, political instability or social unrest given the expected economic downturn. These could delay key milestones, which include project effectiveness and implementation of activities. The World Bank, PIU and PREA are working closely with the

⁵⁹ <https://www.banquemonde.org/fr/news/feature/2013/06/05/madagascar-measuring-the-impact-of-the-political-crisis>

⁶⁰ Based on the gap between where the economy could have been and where it was in 2013



Ministry Economy and Finance, as well as institutions benefiting from the project, to ensure adequate funds are available and adequately budgeted in the Finance Law to carry out essential activities included in the project. They will also work with all key stakeholders to ensure timely preparation of activities and legal reforms and stay ahead of possible delays.



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Madagascar

Digital Governance and Identification Management System Project- PRODIGY

Project Development Objectives(s)

The Project Development Objective is to strengthen the Identity Management ("ID-M") system and government capacity to deliver services in Selected Sectors

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets			End Target
			1	2	3	
Improved access to civil registration and upgraded national identity credentials						
PDO 1- Share of population with new identity credential comprising their Unique Identity Number (UIN) (Percentage)		0.00	0.00	5.00	25.00	50.00
Of which are female (Percentage)		0.00	0.00	50.00	50.00	50.00
Improved government capacity to deliver services in selected sectors.						
PDO 2- Users benefiting from services compliant with new service standards (Number)		0.00	500,000.00	1,000,000.00	3,000,000.00	5,000,000.00



Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets			End Target
			1	2	3	
Creation of a consolidated and interoperable identity management system						
C1-01. Modernization of the ID-M system (Text)	PBC 1	No UIN nor system architecture available	The Recipient has adopted and published, by decree, a new UIN for individuals, legal entities and localities and roll out of the UIN through publication of the standard operational manual	DGU has established the ID-M system architecture in compliance with DGU Interoperability Standards and validated by the NCRIC	Independent audit firm has carried out a performance audit of the ID-M system and prepared an audit report for publication on the DGU website	DGU has tested the upgraded ID-M credentials and published related test reports
C1-02. Share of civil registration entities implementing standard operating procedures (SOP) for registration of vital events (Percentage)		0.00	0.00	10.00	40.00	70.00
C1-03. Share of civil registration entities with secure access to the CR database/system connectivity with the national data base (Percentage)		0.00	0.00	10.00	30.00	50.00
C1-04. Share of children below one year old whose birth is registered (Percentage)		78.00	78.00	83.00	90.00	95.00
C1-05. Digitalized civil registration records (Number)		0.00	0.00	10,000.00	500,000.00	2,000,000.00
Digital and Mobile Government Services						
C2-06. Establishment of institutional, legal and infrastructural foundations for digital transformation (Text)	PBC 2	Institutional, legal and infrastructural foundations for digital transformation are not in place.	The Recipient has adopted and published a decree establishing the DGU's institutional framework as well as the Digital Service Standards Manual	DGU has rolled-out a single government domain (online public portal), offering multi-modal services	DGU has rolled out an authentication and verification system for individuals and legal entities	30% of DGU budget to be financed by the Recipient's internal resources



Indicator Name	PBC	Baseline	Intermediate Targets			End Target
			1	2	3	
C2-07. Implementation of institutional and policy framework for data privacy and protection (Text)	PBC 3	No effective data protection	CMIL operationalized through, inter alia, inclusion of a budget line in Finance Law (2021) and publication of the CMIL Procedures Manual	CMIL has published an annual online report on data privacy and protection	CMIL has published a report on data privacy and protection and organized a public debate on the findings of the report	CMIL has published a report on data privacy and protection and organized a regional public debate on the findings of the report
C2-08. Implementation of institutional and policy framework for civilian cybersecurity (Text)	PBC 4	No effective civilian cybersecurity policy and strategy	Recipient has adopted and published, by decree, a National Civilian Cybersecurity Strategy ("NCCS")	ARTEC has adopted a CERT Procedures Manual to operationalize a civilian CERT.	Independent firm has carried out a cybersecurity audit of key government digital systems	CERT has reviewed (including through public consultations), updated and published the NCCS
C2-09. Systems that are compliant with DGU interoperability standards (cumulative) (Number)	PBC 5	0.00	2.00	4.00	6.00	10.00
C2-10. People certified on DGU compliant digital training (Number)		0.00	500.00	2,000.00	3,500.00	5,000.00
Of which are female (Number)		0.00	250.00	1,000.00	1,750.00	2,500.00
C2-11. Services included in performance dashboard (Citizen engagement Indicator) (Number)		0.00	2.00	5.00	10.00	15.00



Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
<p>PDO 1- Share of population with new identity credential comprising their Unique Identity Number (UIN)</p>	<p>This indicator measures the share of the total population (adult and children) that possesses a birth certificate or identity card that includes their Unique Identity Number. This includes existing credentials that have been digitalized and assigned a UIN. Population includes:</p> <ul style="list-style-type: none"> Malagasy citizens Foreign residents in Madagascar <p>As a reference, population base from the 2018 census: 26 000 000 with an annual growth rate of 3% (INSTAT)</p>	Biannual	NCRIC reports INSTAT reports	PIU M&E specialist to collect data from NCRIC and INSTAT	PIU M&E specialist
<p>Of which are female</p>	<p>This indicator measures the share of women (adult and children) among those that possesses a birth certificate or identity card that includes their Unique Identity Number. This includes existing credentials that have been digitalized and assigned a UIN.</p>	Biannual	NCRIC reports INSTAT reports	PIU M&E specialist to collect data from NCRIC and INSTAT	PIU M&E specialist



<p>PDO 2- Users benefiting from services compliant with new service standards</p>	<p>Measures the number of users benefitting from public services of improved quality as a result of their compliance with the DGU’s service standards. This includes streamlined services (digital and analog), services providing access to information, multimodal service delivery (phone, SMS, USSD), services for frontline workers, and indirect beneficiaries. This does not include identity with UIN (measured in PDO 1 indicator).</p>	<p>Biannual</p>	<p>DGU reports</p>	<p>PIU M&E specialist to collect data from DGU</p>	<p>PIU M&E specialist</p>
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Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
<p>C1-01. Modernization of the ID-M system</p>	<p>This PBC will incentivize the adoption of a methodology for the issuance of UIN to be used government wide. It will also promote compliance of the civil registration and</p>	<p>Biannual</p>	<p>Extract from the official publication (including administration website), Dis</p>	<p>PIU M&E specialist to collect data from NCRIC, DGU and CMIL</p>	<p>PIU M&E specialist</p>



	<p>identification system architecture and security with standards associated with quality service provision. These indicators will be centralized in a performance dashboard to allow for real time M&E. An independent audit will be commissioned at year 3 to inform upgraded system. An updated ID credentials include upgraded ID card, upgraded certificate, smart ID, etc.</p>		<p>patch slip and / or acknowledgment of receipt of the procedure manual, PV or NCRIC activity reports, DGU reports, CMIL test reports, Independent audit report of ID-M system</p>		
<p>C1-02. Share of civil registration entities implementing standard operating procedures (SOP) for registration of vital events</p>	<p>Share of civil registration entities (1879) that are applying SOPs either analog or electronic registration of vital events. A registration office is a center where you can create and modify a civil registration record. Registration offices include : -1695 communes - 6 boroughs (arrondissements) -119 districts</p>	<p>Biannual</p>	<p>NCRIC reports, INSTAT reports</p>	<p>PIU M&E specialist to collect data from NCRIC, MID and INSTAT</p>	<p>PIU M&E specialist</p>



	- 41 lower courts - 21 consulates				
C1-03. Share of civil registration entities with secure access to the CR database/system connectivity with the national data base	Percentage of civil registration entities with secure digital access to the central civil registration database / system, namely: -1695 communes - 6 boroughs (arrondissements) -119 districts - 41 lower courts - 21 consulates	Biannual	NCRIC reports, DGU reports	PIU M&E Specialist to collect data from NCRIC, DGU	PIU M&E Specialist
C1-04. Share of children below one year old whose birth is registered	This indicator measures the proportion of children under one whose birth is registered in the civil status register	Annual	NCRIC reports, INSTAT reports	PIU M&E specialist to collect data from NCRIC and INSTAT	PIU M&E specialist
C1-05. Digitalized civil registration records	This indicator measures the proportion of digitalized records which are the database entries that include both the digital recording of new births as well as the entry of existing records to retroactively give people the new UIN.	Biannual	NCRIC reports, INSTAT reports	PIU M&E specialist to collect data from NCRIC and INSTAT	PIU M&E specialist
C2-06. Establishment of institutional, legal and infrastructural foundations for digital transformation	This indicator measures the effectiveness of the establishment of the	Annual	Extract from the official publication	PIU M&E specialist to collect data from DGU	PIU M&E specialist



	<p>foundations of the digital transformation framework and procedures, which includes:</p> <ul style="list-style-type: none"> • DGU resources - mandate, staffing, expenditure control for digital goods and services, specific salary scales; • Service standards and digital service standards manual • Deployment of a single government domain • Deployment of the digital authentication and verification system for natural and legal persons • Government funding allocated to the DGU of the transformation process 		<p>establishing the DGU , DGU website, Web data analytics, Electronic log of messages / interactions with users, Extract of the Finance Law mentioning the budget line dedicated to DGU, DGU Financial statements, DGU reports</p>		
<p>C2-07. Implementation of institutional and policy framework for data privacy and protection</p>	<p>This indicator will measure the Government’s progress in implementing the institutional and policy framework required for effective data privacy and protection, including the operationalization of the CMIL, and the biannual</p>	<p>Annual</p>	<p>CMIL activity reports, Extract of the Finance Law, CMIL Website link</p>	<p>PIU M&E specialist to collect data from CMIL</p>	<p>PIU M&E specialist</p>



	publication of progress reports and external audits conducted by an independent firm, to be discussed during public workshops organised by the CMIL, with civil society organisations.				
C2-08. Implementation of institutional and policy framework for civilian cybersecurity	This indicator will measure the Government's progress in implementing the institutional and policy framework required for cybersecurity, including the adoption of a civilian cybersecurity policy and strategy, the operationalization of the CERT, the independent audit of key government systems, and the update of the national cybersecurity strategy based on the recommendations of a national debate.	Annual	Official publication of cybersecurity policy, Copy of signed contracts for key CERT positions, Copy of CERT manual of procedures, Audit report security of key government digital systems, Online publication of the CERT consultation report	PIU M&E specialist to collect data from CERT	PIU M&E specialist



C2-09. Systems that are compliant with DGU interoperability standards (cumulative)	This indicator measures the number of Government systems that are interconnected and able to verify and authenticate users, in compliance with the interoperability standards.	Annually	DGU certification reports	PIU M&E specialist to collect data from DGU	PIU M&E specialist
C2-10. People certified on DGU compliant digital training	The total number of people, including public agents, IT unit members, local government, and students, which have satisfactorily completed at least one digital training, which has been certified by the DGU, and provided by partner organizations (private and public).	Biannual	DGU reports, Certified organizations reports	DGU collects data from partner organizations offering certified trainings PIU M&E specialist collecting data from DGU thereafter	PIU M&E specialist
Of which are female	Number of people having satisfactorily completed at least one digital training, which are women	Biannual	DGU reports, Certified organizations reports	DGU keeps track of women agents benefiting from trainings, PIU M&E specialist collecting data from DGU thereafter	PIU M&E specialist
C2-11. Services included in performance dashboard (Citizen engagement Indicator)	A performance dashboard will be developed and published online and will include service performance indicators and feedback	Annual	- Performance dashboard - DGU reports	PIU M&E specialist to collect data from DGU and CSOs	PIU M&E specialist



	from citizens and businesses on the quality of services provided, based on information collected through surveys. This includes multimodal services, and services to frontline workers. The dashboard will be used to create accountability and incentives to improve service delivery performance in partnership with CSOs		- CSO assessments and reports		
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Performance-Based Conditions Matrix

PBC 1	Modernization of the ID-M system				
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount	
Intermediate Outcome	No	Text	7,500,000.00	5.24	
Period	Value		Allocated Amount (USD)	Formula	
Baseline	No UIN nor system architecture available				
2021	PBC 1.1 - The Recipient has adopted and published, by decree, a new UIN for individuals, legal entities and localities and roll out of the UIN through publication of the standard operational manual		1,000,000.00	Binary	



2022	PBC 1.2 - DGU has established the ID-M system architecture in compliance with DGU Interoperability Standards and validated by the NCRIC		2,000,000.00	Binary
2023	PBC 1.3 - Independent audit firm has carried out a performance audit of the ID-M system and prepared an audit report for publication on the DGU website		2,500,000.00	Binary
2024	PBC 1.4 - DGU has tested the upgraded ID=M credentials and published related test reports		2,000,000.00	Binary
PBC 2	Establishment of institutional, legal and infrastructural foundations for digital transformation			
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Process	No	Text	1,700,000.00	1.19
Period	Value		Allocated Amount (USD)	Formula
Baseline	Institutional, legal and infrastructural foundations for digital transformation are not in place.			
2021	PBC 2.1 - The Recipient has adopted and published a decree establishing the DGU's institutional framework as well as the Digital Service Standards Manual		200,000.00	Binary
2022	PBC 2.2 - DGU has rolled-out a single government domain (online public portal), offering multi-modal services		200,000.00	Binary



2023	PBC 2.3 - DGU has rolled out an authentication and verification system for individuals and legal entities		650,000.00	Binary
2024	PBC 2.4 - 30% of DGU budget financed by the Recipient's internal resources		650,000.00	Binary
PBC 3	Implementation of institutional and policy framework for data privacy and protection			
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Process	No	Text	1,700,000.00	1.19
Period	Value		Allocated Amount (USD)	Formula
Baseline	No effective data protection			
2021	PBC 3.1 - CMIL operationalized through, inter alia, inclusion of a budget line in Finance Law (2021) and publication of the CMIL Procedures Manual		200,000.00	Binary
2022	PBC 3.2 - CMIL has published an annual online report on data privacy and protection		200,000.00	Binary
2023	PBC 3.3 - CMIL has published a report on data privacy and protection and organized a public debate on the findings of the report		650,000.00	Binary
2024	PBC 3.4 - CMIL has published a report on data privacy and protection and organized a regional public debate on the findings of the report		650,000.00	Binary



PBC 4				
Implementation of institutional and policy frameworks for civilian cybersecurity				
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Process	No	Text	1,600,000.00	1.12
Period	Value		Allocated Amount (USD)	Formula
Baseline	No effective civilian cybersecurity policy and strategy			
2021	PBC 4.1 - Recipient has adopted and published, by decree, a National Civilian Cybersecurity Strategy (“NCCS”)		200,000.00	Binary
2022	PBC 4.2 - ARTEC has adopted a CERT Procedures Manual to operationalize a civilian CERT		200,000.00	Binary
2023	PBC 4.3 - Independent firm has carried out a cybersecurity audit of key government digital systems		650,000.00	Binary
2024	PBC 4.4 - CERT has reviewed (including through public consultations), updated and published the NCCS		550,000.00	Binary
PBC 5				
Systems that are compliant with DGU interoperability standards (cumulative) (number)				
Type of PBC	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	No	Text	10,000,000.00	6.99
Period	Value		Allocated Amount (USD)	Formula



Baseline	0.00		
2021	PBC 1.1 - 2	500,000.00	Binary
2022	PBC 5.2 - 4	1,500,000.00	Binary
2023	PBC 5.3 - 6	4,000,000.00	Binary
2024	PBC 5.4 - 10	4,000,000.00	Binary

Verification Protocol Table: Performance-Based Conditions

PBC 1	Modernization of the ID-M system
Description	<p>This PBC will incentivize the adoption of a methodology for the issuance of UIN to be used government wide. It will also promote compliance of the civil registration and identification system architecture and security with standards associated with quality service provision. These indicators will be centralized in a performance dashboard to allow for real time M&E. An independent audit will be commissioned at year 3 to inform upgraded system. An updated ID credentials include upgraded ID card, upgraded certificate, smart ID, etc</p> <ul style="list-style-type: none"> • PBC 1.1: The results are achieved when a (i) regulatory act establishing the unique identifier number for individuals, legal entities and localities is adopted and published and (ii) the standard operational manual for introduction and use of the UIN for all relevant parties is published and disseminated to civil registration entities and relevant government agencies (courts); • PBC 1.2: The interoperability standards define the norms and standards on the exchange of data and communication of information systems that interact with government systems and databases. These standards are published by the DGU and include standards on development, service performance and availability, trade security. The architecture of the ID-M system is considered implemented when (i) it has been tested and validated by the NCRIC on pilot sites and declared ready for roll out (ii) the test report of the DGU prototype version is available; • PBC 1.3: This PBC will be deemed achieved when (i) an independent firm was recruited to carry out a performance audit of the identity management system in Madagascar, (ii) the final audit report is made publicly available online on the government website; • PBC 1.4: The indicator is considered to be met when at least one improved



	identification solution has successfully passed a protocol test, as defined jointly by the CMIL and the DGU. The protocol test should include at least (i) An user experience evaluation (ii) an assessment of risks and proposed mitigation measures regarding cybersecurity and data protection.
Data source/ Agency	- Extract from the official publication (including administration website) - Dispatch slip and / or acknowledgment of receipt of the procedure manual - PV or NCRIC activity reports - DGU reports - CMIL test reports - Independent audit report of ID-M system
Verification Entity	Court of Account with support from Independent firm
Procedure	<p>An online portal of the project results will be set up and managed by the Court of Account, acting as an independent auditor. The responsible for each indicator with support from the PIU will submit evidence of each target achievement in the aforementioned portal for verification and validation by the Court of Account afterwards.</p> <p>Eligible evidence includes:</p> <ul style="list-style-type: none"> • Excerpts from the official journal and / or link to government website references • Download links • Certification and / or audit reports • Activity reports • Evaluation reports • Administrative documents which may comprise manuals of procedures, minutes, circular notes, etc.
PBC 2	Establishment of institutional, legal and infrastructural foundations for digital transformation
Description	<p>This PBC measures the effectiveness of digital transformation framework and procedures</p> <ul style="list-style-type: none"> • PBC 2.1 : The indicator is considered reached if (i) a regulatory act establishing the unit is adopted and published, and defines the DGU as a public establishment, authorized to carry out industrial and commercial operations, endowed with financial autonomy and able to compete with the private sector to attract talent and human resources (ii) the DGU service standards and digital standards manual are available online; • PBC 2.2: The indicator is considered to be achieved when (i) a unique government portal is publicly available and operational at least 3 months before the verification period (ii)the main information on the site is accessible from a telephone, using suitable access with poor connectivity (vocal example or SMS) (3)at least 1000 visitors have consulted the portal or received information using suitable access with poor connectivity (eg voice or SMS); • PBC 2.3: The authentication and identification system aims to ensure that the person seeking to connect is truly one that is identified. This identification guarantees unequivocally that the right person is authenticated, even in the case of



	<p>homonymy. The indicator is considered met when (i) at least 1.000 legal, or public entities, have used the system of authentication to access services, (ii) at least four government services used the system, (3) a report on the deployment of the digital authentication system is submitted by DGU; • PBC 2.4. This indicator is met when (i) a budget line is provisioned in the 2024 Finance Law, in Commitment Authorization and Payment Credit for the 3 fiscal years, and/or to be managed by the DGU for costs associated with digital transformation, excluding salaries; (ii) own resources of DGU, allow it to cover at least 30 percent of its budget operation for 2024.</p>
Data source/ Agency	- DGU website - Web data analytics - Electronic log of messages / interactions with users - Extract of the Finance Law mentioning the budget line dedicated to DGU - DGU Financial statements - DGU reports
Verification Entity	Court of Account with support from independent firm
Procedure	<p>An online portal of the project results will be set up and managed by the Court of Account, acting as an independent auditor. The responsible for each indicator with support from the PIU will submit evidence of each target achievement in the aforementioned portal for verification and validation by the Court of Account afterwards.</p> <p>Eligible evidence includes:</p> <ul style="list-style-type: none"> • Excerpts from the official journal and / or link to government website references • Download links • Certification and / or audit reports • Activity reports • Evaluation reports • Administrative documents which may comprise manuals of procedures, minutes, circular notes, etc.
PBC 3	Implementation of institutional and policy framework for data privacy and protection
Description	<p>This indicator will measure the Government’s progress in implementing the institutional and policy framework required for effective data privacy and protection, including the operationalization of the CMIL, and the biannual publication of progress reports and external audits conducted by an independent firm, to be discussed during public workshops organised by the CMIL, with civil society organisations. • PBC 3.1: This indicator is met when : (i) at least two CMIL meetings have been held, (ii) the budget line to finance the CMIL activities is included in the 2021 Finance Law as Commitment Authorization and Payment Credit for at least three years, (iii) the CMIL procedures manual is published on the administration’s website; • PBC 3.2: This indicator is met when an annual report of data privacy and protection is published; • PBC 3.3 : This indicator is met when the CMIL has organized a national public debate on the data privacy report in collaboration with civil society; • PBC</p>



	3.4 : This indicator is met when the CMIL has organized a regional public debate on the data privacy report in collaboration with civil society.
Data source/ Agency	- CMIL activity reports - Extract of the Finance Law - CMIL Website link
Verification Entity	Court of Account with support from independent firm
Procedure	<p>An online portal of the project results will be set up and managed by the Court of Account, acting as an independent auditor. The responsible for each indicator with support from the PIU will submit evidence of each target achievement in the aforementioned portal for verification and validation by the Court of Account afterwards.</p> <p>Eligible evidence includes:</p> <ul style="list-style-type: none"> • Excerpts from the official journal and / or link to government website references • Download links • Certification and / or audit reports • Activity reports • Evaluation reports • Administrative documents which may comprise manuals of procedures, minutes, circular notes, etc.
PBC 4	Implementation of institutional and policy frameworks for civilian cybersecurity
Description	<p>This indicator will measure the Government’s progress in implementing the institutional and policy framework required for cybersecurity, including the adoption of a civilian cybersecurity policy and strategy, the operationalization of the CERT, the independent audit of key government systems, and the update of the national cybersecurity strategy based on the recommendations of a national debate and stakeholders consultation. • PBC 4.1: This indicator is met when a cybersecurity policy decree is adopted; • PBC 4.2: This indicator is met when (i) the CERT procedures manual is adopted, including the definition of key position; (ii) the key positions defined in the CERT procedures manual are recruited; • PBC 4.3: This indicator is met when (i) The independent CERT team realized a security audit of key government digital systems in Madagascar, (ii) the final audit report is produced by an independent firm; • PBC 4.4: This indicator is considered met when (i) CERT organizes a public consultation on the implementation of national cybersecurity strategy (ii) CSO participate in the debate (iii) A roadmap for updating the national cybersecurity strategy is adopted.</p>
Data source/ Agency	- Official publication of cybersecurity policy - Copy of signed contracts for key CERT positions - Copy of CERT manual of procedures - Audit report security of key government digital systems - Online publication of the CERT consultation report



Verification Entity	Court of Account with support from independent firm
Procedure	<p>An online portal of project results will be set up and managed by the Court of Account, acting as an independent auditor. The person responsible for each indicator will submit evidence of each target achievement in the aforementioned portal for verification and validation by the Court of Account afterwards. Eligible evidence includes:</p> <ul style="list-style-type: none"> • Excerpts from the official journal and / or link to government website references • Download links • Certification and / or audit reports • Activity reports • Evaluation reports • Administrative documents which may comprise manuals of procedures, minutes, circular notes, etc.
PBC 5	Systems that are compliant with DGU interoperability standards (cumulative) (number)
Description	This indicator measures the number of Government systems that are interconnected and able to verify and authenticate users, in compliance with the interoperability standards.
Data source/ Agency	DGU certification reports
Verification Entity	Court of Account with support from independent firm
Procedure	<p>An online portal of the project results will be set up and managed by the Court of Account, acting as an independent auditor. The responsible for each indicator with support from the PIU will submit evidence of each target achievement in the aforementioned portal for verification and validation by the Court of Account afterwards.</p> <p>Eligible evidence includes:</p> <ul style="list-style-type: none"> • Excerpts from the official journal and / or link to government website references • Download links • Certification and / or audit reports • Activity reports • Evaluation reports • Administrative documents which may comprise manuals of procedures, minutes, circular notes, etc.



ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Madagascar

MG- Digital Governance and Identification Management System Project- PRODIGY

Summary of the project and institutional arrangements

1. The objective of the proposed project is to strengthen the Identity Management system and government capacity to deliver services in Selected Sectors.
2. The proposed amount of the financing is US\$143 million. The components 1 and 2 will be partially disbursed against the achievement of agreed performance-based conditions.

Table 1.1: Project Investment

Component	Description	Cost US\$ million		Ratio of PBC as share of Component / Total project
		TA/Investment	PBC	
1	Creation of a Consolidated and Interoperable ID-M System	78.5	7.5	9%
2	Digital and Mobile Government Services	37	15	29%
3	Project Management and Implementation	5	0	-
	Sub-total	120.5	22.5	
	Total	143		16%

FM assessment conclusion

3. **As part of project appraisal, an FM Assessment was carried out by the World Bank to evaluate the adequacy of FM arrangements to support project implementation.** The assessment was carried out in accordance with the Directives and Policy for IPFs issued on September 30, 2018 and the World Bank Guidance on FM in World Bank IPF Operations issued on February 10, 2017. The objective of the assessment was to determine whether the proposed FM arrangements would: (i) ensure timely availability of funding to support project activities; (ii) be capable of correctly and completely recording all project transactions; (iii) facilitate the preparation of regular, accurate, reliable, and timely financial reports for monitoring and decision-making processes; (iv) ensure safeguard the project’s assets; and (v) include acceptable auditing arrangements. The assessment builds significantly on the World Bank’s knowledge of country FM systems and requirements, as well as the experience and performance of implementing entities through its involvement in other World Bank-financed operations.



4. **The assessment was conducted on the designated PIU under the *Programme de Réforme pour l'Effacité de l'Administration - Steering Committee (COS PREA⁶¹)*.** The PIU will be responsible of all fiduciary responsibilities of the project. This PIU is currently managing the PPA as well as the Public Sector Performance Project⁶². The latest World Bank supervision mission dated May 2020 assessed the FM risk as Substantial, the project performance is Moderately Satisfactory. The PIU will undertake full responsibility for the FM function for the project.

5. **Overall, the FM arrangements that are to be applied in administering the project were assessed as adequate (will meet the World Bank's minimum requirements under World Bank Policy and Directive) and FM residual risk was assessed as substantial.** The substantial risk was mainly due to due to the PFM weaknesses particularly in budgeting, the challenges entailed by the operationalization of PBCs and project expenditures, the nature of activities and the high level of decentralization of the project activities. Specifically: (i) PFM weaknesses including mainly the lack of budget credibility, (ii) Interaction and coordination, among different institutions involved in the project implementation, impeded by the high level of decentralization (for instance PIU, the sectorial ministries and Local Government – LGs, DGU); (iii) potential challenges in operationalizing the concept of PBCs, project expenditures under the components 1 and 2; (iv) potential delays in the release of funds by the Government to initiate expenditures required for the PBCs achievement; (v) inadequate accounting and/or delays in reporting at various levels, which would affect the timely reporting on project expenditures and subsequent disbursements; and (vi) potential loss or misappropriation of assets acquired from the project proceeds due to the large number of beneficiaries of equipment allocation and the high level of decentralization.

6. **To further improve the project FM arrangements and reduce the residual FM risk, mitigating measures were agreed to at the appraisal.** Specifically: (i) strengthen the budgeting capacity of the implementing agencies through training and use of simplified tools for the purpose of preparing project annual work plan and budget of the project, (ii) describing clear roles and responsibilities in the PIM for the management of project funds, the planning and budgeting, the accounting and the reporting required from each stakeholder, the contract management, the internal audit; the allocation of assets to LGs and similar beneficiaries, along with robust safeguard and monitoring procedures of these assets, and comprehensive operational procedures related to the PBCs and project expenditures, (iii) make appropriate provision in the Government annual budget that will help the project expenditures financing as agreed in the project expenditures framework, and (iv) design clear project expenditures framework for each PBC settling appropriate information on the implementing agency/budget owner, the disbursement schedule, the accounting and the reporting requirements, the verification arrangements for each PBC.

⁶¹ The PREA is anchored to the secretary general of the Presidency.

⁶² P150116 Public Sector Performance project, 40 million USD, disbursed at 56%, closing in December 2021.



FM Arrangements

Country PFM Systems

7. The Public Expenditure and Financial Accountability⁶³ (PEFA) assessment 2018 showed weak PFM performance of the country despite the 2016 reform program. The report highlights slight improvement and indicates persistent challenges. The PEFA identifies the lack of budget credibility as the main weakness of Madagascar PFM due to an overestimation of public resources, which often fails to take account of fiscal risks, which include unforeseen costs due to cyclones and droughts. Moreover, the report highlights the need to improve the audit and control functions. On the positive side, the assessment recognizes the results from reforms in debt management, budgetary process, multi-year budget programming, and access to information by the legislature and the public. The World Bank is working with other partners to provide coordinated technical assistance. The Public-Sector Performance Project (P150116) is helping to advance improvements in revenue management, improved controls by the Court of Account (CA) and at the local level, and performance monitoring.

8. Given the weaknesses in the PFM system, the project will opt for the gradual use of country PFM systems using a risk-based approach. The designated account is opened at the Central Bank in line with the country system, the independent verification of PBCs and project expenditures will be led by the CA.

STAFFING

9. Overall, the PIU has FM staff with experience in the implementation of World Bank-financed projects. To assist the current Financial Officer, the PIU will recruit a Senior Accountant and two Accountants. Given the significance of the assets purchase and allocation through this project, the PIU will also hire an Assets Management Officer. The FM team of the PIU will be responsible for: (i) securing the timely availability of funds for project activities; (ii) maintaining up to date records on project expenditures and disbursements for financial monitoring; (iii) securing assets acquired with the project's funds; and (iv) timely preparing unaudited interim financial reports (IFRs) as well as annual financial statements of the projects.

PLANNING AND BUDGETING

10. Budget preparation will follow the normal governmental budget arrangements and cycle. The PIU will be in charge of preparing the Annual Work Plan and Budget of the regular components and components with PBCs in coordination with other agencies as needed. A consolidated AWP approved by the Steering Committee (COS PREA) will be sent to the World Bank for approval. The project budget will then be incorporated into the governmental budget process as part of the relevant public entities' budget.

⁶³ PEFA: A 2017 PEFA self-assessment was carried out in 2017 covering the FY2014-2016. In the 2018 PEFA, covering the calendar years 2014 to 2016, 61 percent of the indicators scored D, meaning the performance is below the basic level, while no indicators scored A.



ACCOUNTING AND FINANCIAL REPORTING

11. Accounting: The project accounting system will be maintained on a modified accruals cash basis with disclosure of commitments and will comply with the Malagasy General Chart of Accounts (*Plan Comptable Général 2005*). The accounting framework is broadly in line with the International Accounting Standards International Accounting Standards / International Financial Reporting Standards IAS/IFRS. All information on the budget execution will be entered ex post in the Government Integrated Financial Management Information Systems (IFMIS). The PIU is equipped with an adequate accounting system to enable the project's accounting, budget follow-up and reporting. The accounting records will reflect adequately the project's structure in terms of components and sub-components and the source of funds (GFF, IDA). Segregation between components disbursing based on in-put will be segregated and those with PBCs will be made in this structure. The proposed structure will enable appropriate financial reporting and monitoring of the project implementation in budget execution and utilization of funds.

12. Financial Reporting: The PIU will prepare quarterly IFRs and annual project audited financial statements. For the reporting and monitoring purpose. IFRs will be submitted to the World Bank within 45 days after the end of the quarter. The financial reports will be designed to provide quality and timely information to the project management. At a minimum the IFR will include: (i) a statement of sources and uses of funds for the quarter, year to date and cumulative to end period (from project inception) reconciled to opening and closing bank balances; (ii) a statement of uses of funds (expenditures) by project component/ sub-component comparing actual expenditures against the budget, with explanations for significant variances; (iii) a progress report of PBC activities; and (iv) assets allocation statement. Specific reporting requirements for the project components will be detailed in the PIM. It will be prepared not later than one month after the effectiveness

INTERNAL CONTROLS AND AUDIT

13. Internal control comprises the whole system of control, financial or otherwise, established by management to: (a) carry out project activities in an orderly and efficient manner; (b) ensure adherence to policies and procedures; (c) ensure maintenance of complete and accurate accounting records; and (d) safeguard the project's assets. The PIM will include a section on FM outlining project-specific requirements in relation to the budget, accounting, internal control and internal audit, funds flow, auditing, transaction coding and reporting, as well as the FM roles and responsibilities within the PIU. The PIM will clarify procedures related to fixed assets' management. The project will apply the procurement procedures of the World Bank.

14. The PIU will recruit a Senior Internal Auditor to perform periodic reviews of the performance of the internal control of the project.

PBCs MONITORING AND VERIFICATION MECHANISM

15. CA will lead the verification of PBCs achievement. The CA will be supported by an Independent Verification Agent (IVA) appointed by the PIU, with terms of reference and qualifications satisfactory to the World Bank. The project expenditures framework and the PBCs (result) verification mechanism will be clearly described in the PIM. The PIU will



submit the interim semiannual results report on PBCs achievement, including information on the project expenditures. The report shall be submitted to the World Bank no later than forty-five (45) days after the end of the semester.

16. The PIU will prepare annual results and PBCs achievement report that will be submitted to the CA and the IVA. The PBC verification mechanism will be further developed in the PIM. The Results Verification Report will be submitted to the World Bank within three months after the PBC achievement. This report will cover the achievement of the PBCs as well as the validity of the project expenditures. As part of its due diligence, the World Bank retains the responsibility for validating the verified results presented by the Borrower for disbursement. The certification of the achievement of the PBCs will be sent to the Borrower no later than one month after the report receipt. The PIU will submit the withdrawal application upon receipt of this certification.

PROJECT AUDIT REQUIREMENTS

17. In accordance with World Bank policy⁶⁴, the project is required to submit audited annual project financial statements. The audit will be conducted in accordance with international standards of auditing by an acceptable external auditor recruited with Terms of Reference (ToRs) approved by the World Bank. Given the low capacity of the CA and their involvement in the results verification, the audit of the financial statements of the project will be carried out by a private audit firm acceptable to the World Bank. The auditor will provide a Management Letter, which will, among other things, outline deficiencies or weaknesses in internal control system of the project. The selection and contracting of the audit firm will be funded under Component 3, and the report will be submitted to the World Bank within six months after the end of the fiscal year.

18. Disclosure of Audit Report. In accordance with the World Bank's policies, the World Bank requires that the client disclose the audited financial statements in a manner acceptable to the World Bank. Following the World Bank's formal receipt of these statements from the Borrower, the World Bank makes them available to the public in accordance with the World Bank Policy on Access to Information.

FLOW OF FUNDS AND DISBURSEMENT ARRANGEMENTS

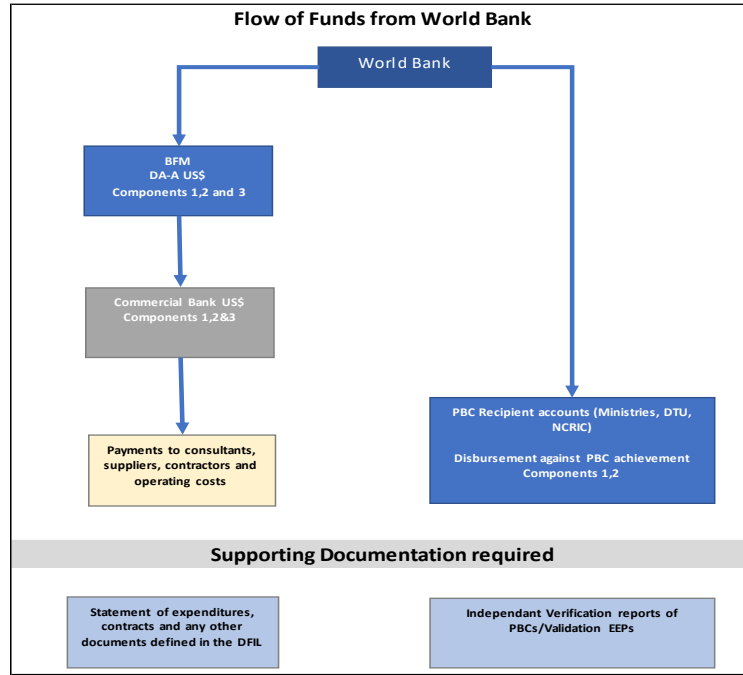
Disbursements from the World Bank

19. In accordance with the applicable regulations in Madagascar for donors-financed operations, the PIU will use the designated account opened at the Central Bank of Madagascar denominated in US dollars and currently receiving the PPA funds. The secondary US\$ account opened at a commercial bank will enable payment of project expenditures under the project. Disbursements would be made in accordance with the World Bank Disbursement Guidelines for Projects, dated February 2017. The disbursement methods for this project include: advance to DA, reimbursement, direct payment, and special commitment. The disbursement and financial information letter will define the applicable disbursement methods and terms. 84 percent of the project financing will be disbursed based on statement of expenses. 16 percent will be disbursed against PBCs achievement and project expenditures (as noted below).

⁶⁴ WB Directives and Policy for IPFs issued on September 30, 2018, formerly known as OP/BP 10.



Figure 1.1: Funds Flow Arrangement



Disbursement of components with PBC

20. **Components 1 and 2 will partially disburse against PBCs achievement and defined project expenditures.** These project expenditures will be financed with Government own resources and reimbursed with the project financing upon confirmed achievement of the PBCs. The disbursement will be directly made to accounts of the relevant beneficiaries identified by the Government.

21. The project expenditures framework will be part of the PIM. At the time of the appraisal, the proposed project expenditures list was discussed, and project expenditures were defined as follows:

Component 1 project expenditures:

22. For PBC 1 - *Modernization of the ID-Management system aspects* (US\$7.5 million), the project expenditures will include:

- Government transfers to communes for civil registration system;
- Additional transfers to municipalities (*subventions complémentaires et d'investissements*) from year two onward ;
- Operating costs of NCRIC (including salaries, office supplies); and
- Purchase of equipment for the MID and affiliate agencies, the Ministry of Justice and affiliate agencies, Ministry of Health, etc. incurred under the scope of programs pertaining to civil registry and the adoption of the UIN.

Component 2 project expenditures:

23. For PBC 2 *Establishment of legal, institutional and technological foundations for digital transformation* (US\$1.7 million), PBC 3 *Implementation of institutional and policy frameworks for data privacy* (US\$1.7 million), PBC 4 (US\$1.6



million) *Implementation of institutional and policy frameworks for cybersecurity, and PBC 5 Systems compliant with interoperability standards (cumulative)* (US\$10 million), the project expenditures will include:

- Government transfers to the national civilian CERT and cybersecurity organizations, the CMIL, and the DGU, to support their operating costs;
- purchase of equipment and services related to digital development;
- purchase of equipment of Ministry of Justice and other public institutions related to the implementation of data privacy policy;
- purchase of IT solutions to improve security among public institutions;
- cost of compliance with new standards of services (analogue and digital) of public institutions; and
- transfers to communes and communal services for education and health services.

24. Under the components 1 and 2, PBC-based disbursement is combined with input-based disbursement, as such expenditure items (e.g. contracts) presented to justify an input-based disbursement cannot be double-counted and used to justify a result-based disbursement. Consequently, these project expenditures should be different from the expenditures financed under the components 1 and 2 traditional investment part of the project. Furthermore, the project expenditures include procurable items for which the World Bank IPF’s Procurement rules will apply.

Table 1.2: IDA credit Disbursement Categories

Category	Amount of the Credit Allocated (expressed in USD)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Project Expenditures under Part 1.2.2 of the Project.	7,500,000	100%
(2) Project Expenditures under Part 2.1.2 of the Project.	15,000,000	100%
(3) Goods, works, non-consulting services, and consulting services Incremental Operating Costs and Training under Parts 1, 2, and 3 except for Parts 1.1.2, 1.2.2 and 2.1.2 of the Project.	114,640,000	100%
(4) Refund of Preparation Advance	2,860,000	Amount payable pursuant to Section 2.07(a) of the General Conditions
[(5)] Front-end Fee		Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 3.08 (b) of the General Conditions.
[(6)] Interest Rate Cap or Interest Rate Collar premium		Amount due pursuant to Section 4.06 (c) of the General Conditions
TOTAL AMOUNT	140,000,000	



Table 1.3: GFF grant disbursement categories

Category	Amount of the Grant Allocated (expressed in USD)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, consulting services, Incremental Operating Costs and Training costs under Part 1.1.2 of the Project	3,000,000	100%
TOTAL AMOUNT	3,000,000	

25. The FM risk was assessed as substantial even after considering the mitigating measures.

Table 1.4: Project FM Risk Assessment and Mitigation

Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
Inherent risk	H			S
Country level: Weak PFM performance of the country despite the 2016 reform program, resulting in the risk of lack of budget credibility and, lack of transparency and accountability in the use of public funds.	H	The Government of Madagascar is committed to implement further reforms of the country’s PFM with support from the development partners.	N	H
Entity level: FM requirements not met, weak FM capacity	S	The PIU will recruit additional experienced staff to support the current FM manager.	N	M
Project level: The resources of the project may have been distracted due to weak control environment. The interaction and coordination, among different institutions involved in the project implementation, may be impeded by the high level of decentralization (for instance PIU, the sectorial ministries and Local Government - LGs);	S	The internal control system, to be described in the PIM, will frame the use of financing for the intended project objectives. The PIM will set clearly the responsibilities of each stakeholder in the implementation of the project.	N	S
Control Risk				



Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
<p>Budgeting: Weaknesses in planning capacity, budgetary execution and control may lead to budgetary overruns or inappropriate use of project funds.</p>	S	<p>The PIM will spell out the budgeting and budgetary control arrangements to ensure appropriate budgetary oversight. The budget follow-up will be documented in the quarterly IFR.</p> <p>A very comprehensive structure of components will be adopted to enable appropriately detailed reports and satisfactory monitoring of the budget execution.</p> <p>The implementing entities will benefit from capacity building in budgeting.</p>	N	S
<p>Accounting: Reliable and accurate information not provided to inform management decision</p>	S	<p>The PIU will rely on qualified experienced FM staff to ensure appropriate performance of the accounting and FM functions.</p> <p>The financial reporting processes will be facilitated by the utilization of appropriate computerized accounting systems and detailed structure of components.</p>	N	M
<p>Internal Control: Business process, role and responsibilities within the project is not clear leaving to ineffective of control.</p> <p>Delay or failure in the project implementation due to weaknesses in contract management (large contracts related to rehabilitation and equipment purchase)</p> <p>Loss or misappropriation of assets due to the high decentralization of the project and weak assets' management</p>	S	<p>The PIM will clearly set the responsibility of the various stakeholders.</p> <p>The PIM will contain all the key internal control processes pertaining to the various project activities. The internal auditor will periodically review the adequacy of the internal control and the compliance in practice.</p> <p>The PIM will establish robust contract management procedures, particularly on equipment acquisition and allocation to beneficiaries.</p> <p>The assets safeguards across the country, property will be clearly defined in the PIM.</p> <p>The PIU will recruit an Assets Management Officer to oversee the allocation of assets and ensure their safeguard.</p>	N	S



Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
capacity				
<p>Funds Flow: Inappropriate Funds arrangements may lead to non-financing of the project activities.</p> <p>Delay (in payment/ replenishment of DA) due to low planning capacity. Unavailability of funds expected from the Government or delay in funds release preventing from timely achievement of the PBCs and delay in the related disbursement.</p> <p>Delay in the validation of PBCs and project expenditures impacting the subsequent disbursement.</p> <p>Frauds and corruption</p>	H	<p>The process leading to payment will be well described in the PIM and monitored to mitigate the risk of the use of funds for unintended purposes.</p> <p>Each project implementing entities (sectorial ministries, DGU, NCRIC...) will ensure timely inclusion of project's activities within the entity's budget according to national procedures. Clear annual disbursement schedule will be developed jointly with the implementing entities.</p> <p>Comprehensive project expenditures framework and PBCs result verification mechanism will be part of the PIM.</p> <p>An internal auditor will be recruited to reinforce the internal control of the project.</p> <p>A robust grievance mechanism will be developed under this project.</p>	N	S
<p>Financial Reporting: The project may not be able to produce quality financial reports required in a timely manner as required for project monitoring and management.</p>	S	<p>The PIU will adopt a comprehensive components' structure to enable detailed reporting. The IFR format agreed at negotiations will be included in the PIM. The PIU will use appropriate computerized accounting enabling the efficient and timely generation of financial information.</p>	N	M
<p>External Auditing: Delays in submission of audit reports. Poor quality of audit report</p> <p>Low capacity of the CA to verify achievement of results and</p>	S	<p>The external auditor, private audit firm, will be recruited early. The computerized accounting system will lead to timely generation of IFRs and financial statements.</p> <p>The CA will be supported by external independent verification agency recruited</p>	N	S



Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
related project expenditures.		with TOR approved by the World Bank. The result (PBCs) verification mechanism will be developed in the PIM.		
Governance and Accountability: Possibility of corrupt practices including bribes, abuse of administrative and political positions, mis-procurement and misuse of funds etc., are a critical issue.	S	Robust FM arrangements, World Bank FM and procurement supervisions. Effective internal control and internal audit arrangements.	N	S
Overall FM risk	S			S

26. The agreed FM action plan is summarized as follows:

Table 1.5: FM Action Plan

Action	Due Date	Responsible
1. Develop and adopt the FM procedures as part of the PIM.	One month after project effectiveness	PIU, World Bank
2. Recruit additional qualified staff including: senior accountant, accountants, assets management officer, and internal auditor	One month after project effectiveness	PIU
3. Develop project expenditures framework for components 1 and 2, together with the reporting requirements for disbursement purposes, 4. Develop the (PBCs) result verification mechanism as part of the PIM	One month after project effectiveness	World Bank, PIU
5. Recruit the project’s external audit	Six months after project effectiveness	PIUs
6. Provide appropriate capacity building on budgeting to the implementing entities	Six months after project effectiveness	PIU
7. Recruit the independent verification agency to support the CA in the PBCs/project expenditures verification	Before initiating disbursements under the PBC disbursement categories (1) and (2)	PIU

IMPLEMENTATION SUPPORT

27. The World Bank will provide implementation support over the project life span. Following a risk-based approach, supervision will focus on the effective operation of the proposed arrangements, including the review of audit reports and IFRs, as well as advice to the task team on all FM issues. Based on the current assessed risks, and on a



preliminary basis, the project will be supervised at least twice a year and may be adjusted as and when the need may arise.

Procurement

28. Applicable rules and procedures. This project will use the World Bank's New Procurement Framework, the procedures specified in the 'World Bank Procurement Regulations for IPF Borrowers' dated July 1, 2016, (Procurement Regulations) revised on August 2018 and the World Bank's Anti-Corruption Guidelines: 'Guidelines on Preventing and Combatting Fraud and Corruption' revised as of July 1, 2016, as well as provisions stipulated in the Financing Agreement. At the beginning of its implementation, the Project will adopt an implementation manual based on and in accordance with these above mention World Bank references.

29. All works, goods and non-consulting services will be procured in accordance with the requirements set forth or referred to in Section VI. Approved Selection Methods: Goods, Works and Non-Consulting Services of the Procurement Regulations, and the consulting services will be procured in accordance with the requirements set forth or referred to in Section VII. Approved Selection Methods: Consulting Services of the Procurement Regulations, as well as according to the PPSD reviewed by and the Procurement Plan approved by the World Bank.

30. Institutional arrangement for procurement. The PRODIGY PIU will be responsible for the project fiduciary aspects. The project will strengthen its procurement capacity by training their procurement team. Additionally, the World Bank's will provide coaching and continuous hands-on support to the project.

31. Procurement risk assessment. A procurement capacity assessment of the PIU to implement the project procurement activities revealed that they had experience with World Bank Guidelines. The assessment concluded that overall procurement risk rating is Substantial.

32. The following mitigation measures are proposed: (a) training for their procurement team. The World Bank will provide specific training on Procurement Regulations to dedicated procurement staff and basic procurement training to all project staff involved in procurement activities; (b) the World Bank's will assist, coach, and provide continuous handholding support to the project staff.

33. Brief summary of the PPSD. Given the specificity of the project particularly the digitalization, the market analysis concluded that Technical Assistances related to Government Information System, digitalization of civil services, IT development, information system audit and certification, procurement of specific software, acquisition of specific technical equipment for mobile check-in (suitcase) will be procured through international competition. Given the recent experience of immediate past governance project, all IT materials will be purchased through direct selection at UNOPS. For workshops and small recurrent services and goods, due to their frequency, the procurement method will be the framework agreement.



34. Procurement Plan. The draft Project Procurement Plan was finalized and approved before negotiations. The Procurement Plan will be updated by the PIU at least on an annual basis to reflect actual project implementation needs. The project will be using the World Bank’s online procurement planning and tracking tools, STEP, to prepare, clear, and update its Procurement Plan and to carry out all procurement transactions.

35. Frequency of procurement supervision. In addition to the prior review carried out by the World Bank, a supervision mission will be conducted every six months and a post-procurement review will be conducted on an annual basis.