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Report No: PAD3349

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF
EUR 89.2 MILLION (US\$100 MILLION EQUIVILANT)

TO THE

REPUBLIC OF TUNISIA

FOR A

GOVTECH: DIGITAL TRANSFORMATION FOR USER-CENTRIC PUBLIC SERVICES

May 24, 2019

Governance Global Practice
Middle East And North Africa Region

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CURRENCY EQUIVALENTS

Exchange Rate Effective Apr 30, 2019

Currency Unit =

US\$1 = 0.8919 EUR

TND1 = 0.33 US\$

FISCAL YEAR

January 1 - December 31

Regional Vice President: Ferid Belhaj

Country Director: Marie Francoise Marie-Nelly

Global Practice Director: Edward Olowo-Okere

Renaud Seligmann

Practice Manager: Hana Brix

Michel Rogy

Simon Carl O'Meally

Task Team Leader: Yuko Okamura

Axel Rifon Perez

ABBREVIATIONS AND ACRONYMS

ADEB	<i>Système d'Aide à la Décision Budgétaire</i> (Budget Management Information System)
AFD	<i>Agence Française de Développement</i> (French Development Agency)
AfDB	African Development Bank
AI	Artificial intelligence
AMG	<i>Assistance Médicale Gratuite</i> (Free Healthcare Assistance)
ANCE	<i>Agence Nationale de Certification Electronique</i> (National Agency for Electronic Certification)
ANETI	National Agency for Employment and Self-Employment
ATI	Access to information
CGSP	<i>Contrôle Général des Services Publics</i> (General Control of Public Service)
CNAM	<i>Caisse Nationale d'Assurance Maladie</i> (National Health Insurance Fund)
CNRPS	<i>Caisse Nationale de Retraite et de Prévoyance Sociale</i> (National Pension Fund)
CNSS	<i>Caisse Nationale de Sécurité Sociale</i> (National Social Security Fund)
CNTE	Centre National des Technologies en Education (National Center for Technology in Education)
CPF	Country partnership framework
CRC	Citizen report card
CRES	<i>Centre de Recherches et d'Etudes Sociales</i> (Centre for Social Studies and Research)
CSC	Citizen Service Centre
CSO	Civil society organization
DE4A	Digital Economy for Africa
DFI	Development finance institution
DGRPA	<i>Direction Générale des Reformes et Prospectives Administratives</i> (General Direction of Public Administrative Reforms)
DLI	Disbursement-linked indicator
DPF	Development policy financing
DU	Delivery Unit
EEP	Eligible expenditure program
EFF	Extended fund facility
EHS	Environmental Health and Safety
EMF	Electromagnetic field
ESCP	Environmental and social commitment plan
ESF	Environmental and social framework
ESMF	Environmental and social management framework
ESRS	Environmental and social review summary
ESS	Environmental and social standards
EU	European Union
FM	Financial management
FMA	Financial management assessment
FMIS	Financial management information system
FYDP	Five-year development plan
G2B	Government to business
G2C	Government to citizens
G2G	Government to government
GDP	Gross domestic product
GIZ	<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i> (German International Cooperation Agency)
GoT	Government of Tunisia
GPEEC	<i>Gestion Prévisionnelle des Emplois, des Effectifs et des Compétence</i> (Workforce and Competency Planning)

GRM	Grievance redressal mechanism
HAICOP	<i>Haute Instance de la Commande Publique</i> (Tunisian Public Procurement Authority)
HCI	Human capital index
HR	Human resources
IAM	Identity access management
ICG	International Crisis Group
ICRR	Implementation completion and results report
ICT	Information and communications technologies
IEC	Information, Education, and Communication
IMF	International Monetary Fund
INSAF	Human resources management information system
IoT	Internet of Things
IPF	Investment project financing
IS	<i>Identifiant Social</i> (Social Identifier)
IUC	<i>Identifiant Unique Citoyen</i> (Unique Citizen Identifier)
IVR	Interactive voice response
KFW	<i>Kreditanstalt für Wiederaufbau</i> (German Government-owned Development Bank)
KOICA	Korean International Development Agency
LPR	Learning performance review
M&E	Monitoring and evaluation
MCSPAPP	Ministry of Civil Service, Public Administration and Public Policy
MDICI	Ministry of Development, Investment and International Cooperation
MENA	Middle East and North Africa
MFD	Maximizing finance for development
MoA	Ministry of Agriculture
MoE	Ministry of Education
MoF	Ministry of Finance
MoLA	Ministry of Local Affairs and Environment
MSA	Ministry of Social Affairs
MoY	Ministry of Youth
MTCEN	Ministère des Technologies de la Communication et de l'Économie Numérique (Ministry of Information Technology, Communication and Digital Economy)
OGI	<i>Organe de Gestion de l'IUC</i> (IUC Management Body)
OGP	Open government partnership
ONI	<i>Organe Nationale de l'interopérabilité</i> (National Organization for Interoperability)
P4R	Program-for-Results
PAPs	Project affected persons
PARPS	Social protection reform support
PCN	Project Concept Note
PDIA	Problem drive iterative adaptation
PDO	Project development objective
PE	Political economy
PEA	Political economy analysis
PIM	Public investment management
PIMA	Public investment management assessment
PIP	Public investment projects
PKI	Public key infrastructure
PLR	Performance learning review

PM	Prime Minister
PMU	Project management unit
PNAFN	<i>Program Nationale d'Aide aux Familles Nécessiteuses</i> (National Assistance Program for Needy Families)
PPP	Public private partnership
PPSD	Program procurement strategy document
PREFAT	Strengthening Foundations for Learning Project
RAP	Resettlement action plan
RPF	Resettlement policy framework
RRA	Risk and resilience assessment
SCD	Systematic Country Diagnostic
SEP	Stakeholder engagement plan
SIADE	<i>Système Informatique pour l'Administration de la Dette Extérieure</i> (External Debt Management Information System)
SIL	Specific Investment Loan
SLA	Service level agreements
SMEs	Small and medium enterprises
SMS	Short message service
SONEDE	<i>Société Nationale d'Exploitation et de Distribution des Eaux</i> (National Society of Exploitation and Distribution of Water)
SORT	Systematic operations risk-rating tool
SP	Social protection
SR	Social Registry
SSO	Single sign-on
STEG	<i>Société Tunisienne de l'Electricité et de Gas</i> (Tunisian Company of Electricity and Gas)
STEP	Systematic Training of Exchanges in Procurement
TA	Technical assistance
TND	Tunisian Dinar
ToC	Theory of change
TTN	Tunisia Trade Net
TUNEPS	Tunisia Online E-Procurement System
UAE	<i>Unité de l'Administration Electronique</i> (Electronic Administration Unit)
VfM	Value for money
WBG	World Development Group
WDR	World Development Report
WGI	Worldwide Governance Indicators



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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Tunisia	Digital Transformation for User-Centric Public Services	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P168425	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"/> Disbursement-linked Indicators (DLIs)	<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)	

Expected Approval Date	Expected Closing Date
14-Jun-2019	31-Jan-2025

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The project development objective (PDO) is to improve equitable access to and the quality and accountability of selected Social Protection and Education services through a GovTech approach.

Access will be measured in terms of: (i) increase in functioning access points for the selected public services; (ii)



increased usage of the selected public services. Gains in equitable access will be measured in terms of two dimensions: (i) improved Social Protection systems (which in themselves improve the ability of the GoT to identify and serve needy groups); (ii) access for targeted vulnerable groups: (a) low-income groups; (b) women in rural areas; (c) illiterates; and (d) disabled people.

Quality will be measured in terms of: (i) user satisfaction; and, (ii) time/efficiency gains in delivery.

Accountability will be measured in terms of: (i) increased availability of sector and service-related information; and, (ii) increased responsiveness of public service providers to user feedback.

A "GovTech" approach has two core elements: (i) putting the citizen at the centre of the reform process; and, (ii) combining public sector reform innovations, change management and digital technologies.

Components

Component Name	Cost (US\$, millions)
User-Friendly Institutional and Digital Delivery Solutions	16.30
Public and Private Sector Capabilities for Speedier and Responsive Service Delivery	41.40
Reinforcing Connectivity in Education and Social Protection for more Equitable Access to and Quality of Services	42.30

Organizations

Borrower: Ministry of Development Investment and International Cooperation

Implementing Agency: Ministry of Technology Information and Communication

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	100.00
Total Financing	100.00
of which IBRD/IDA	100.00
Financing Gap	0.00

DETAILS

World Bank Group Financing



International Bank for Reconstruction and Development (IBRD)	100.00
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Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2019	2020	2021	2022	2023	2024	2025
Annual	0.00	9.23	20.90	27.62	21.19	15.97	5.09
Cumulative	0.00	9.23	30.13	57.75	78.94	94.91	100.00

INSTITUTIONAL DATA

Practice Area (Lead)

Governance

Contributing Practice Areas

Digital Development, Education, Social Protection & Jobs

Climate Change and Disaster Screening

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

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes
b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● High
3. Sector Strategies and Policies	● Substantial
4. Technical Design of Project or Program	● Substantial



5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Substantial
7. Environment and Social	● Moderate
8. Stakeholders	● Moderate
9. Other	● Substantial
10. Overall	● Substantial

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	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	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

Section IA.1(a) of Schedule 2 to the LA:

The Borrower shall, through the MTCEN, within its DU, appoint not later than fifteen (15) days after the Effective Date, or such later date as agreed by the Bank, and thereafter maintain, throughout Project implementation, a Project Implementation Team with composition and resources acceptable to the Bank and defined in the Project Operational Manual, to be responsible for day-to-day management of the Project (including the procurement, financial management and environmental and social aspects)

Section I.A.1(b) of Schedule 2:

The Borrower, through MTCEN, shall, no later than three (3) months after the Effective Date, or such other date as agreed by the Bank, establish, and thereafter maintain throughout Project implementation, the Project Steering Committee with composition acceptable to the Bank and defined in the Project Operational Manual, to provide strategic guidance and oversight of the Project

Other legal covenants (since this is the second ESF project):



Section I.B.1 of Schedule 2: The Borrower shall ensure that the Project is carried out in accordance with the Environmental and Social Standards, in a manner acceptable to the Bank

Section I.B.2 of Schedule 2: the Borrower, through MTCEN, shall ensure that the Project is implemented in accordance with the Environmental and Social Commitment Plan (“ESCP”), in a manner acceptable to the Bank

Conditions

Type	Description
Disbursement	<p>Section II. B. 1 (b) of Schedule 2: No withdrawal shall be made for payments under Category (2) until and unless the Borrower has furnished evidence satisfactory to the Bank with respect to the achievement of the respective Disbursement-Linked Results (DLRs) as referred to in Schedule 4 to this Agreement and the additional supporting documentation set forth in the Disbursement and Financial Information Letter;</p> <p>Section III.B.2 of Schedule 2: Notwithstanding the provisions of Part B.1(b) of this Section, if any of the DLRs referred to in Schedule 4 to this Agreement has not been achieved, the Bank may, by notice to the Borrower: (a) reallocate all or a portion of the proceeds of the Loan then allocated to said DLR to any other DLR; and/or (b) cancel all or a portion of the proceeds of the Loan then allocated to said DLR.</p>



I. STRATEGIC CONTEXT

A. Country Context

- 1. A sustained transition to democracy and an ambitious reform agenda have marked Tunisia's path since the 2011 revolution.** Tunisia is a lower-middle-income country, with a population of 11.6 million and a gross domestic product (GDP) of US\$40.3 billion (2018). Often hailed as the only success story of the Arab Spring, the country has made great strides toward establishing the fundamentals of democracy, including the formation of the National Dialogue Quartet in 2013¹ and the introduction of a new constitution in 2014. The Government of Tunisia (GoT) has also embarked on an ambitious reform agenda, aimed at boosting civil society and democratic freedom as well as stimulating private sector driven growth and job creation. In 2016, the GoT adopted the Five-Year Development Plan 2016–2020, followed by the Economic and Social Roadmap 2018–2020, aimed at accelerating the implementation of reforms focused on macroeconomic and fiscal stabilization; the modernization of social safety nets; and the enhancement of private investment, competitiveness, and productivity. In May 2018, the first free and fair municipal elections were held, further anchoring the democratic culture and laying the groundwork for decentralization.
- 2. The economic situation remains fragile, despite recent modest increase in growth and efforts to contain the fiscal deficit.** The instability in the aftermath of the revolution, due to political unrest and terrorist attacks, weakened the investment climate and severely affected economic sectors, such as tourism, that were traditionally engines of growth and sources of foreign exchange. To counter social tensions, the GoT embraced expansionary fiscal policies, including public sector hiring and wage increases, which have impaired public finances. The fiscal deficit and public debt respectively reached 4.6 percent and 74.0 percent of GDP in 2018.² In addition, the current account deficit widened to 11.0 percent in 2018, and in May 2019, gross international reserves stood at 75 days import cover. Despite these macroeconomic vulnerabilities, GDP growth recovered in 2018 to reach 2.5 percent. This was largely due to stronger performance of the agriculture, services, and export-oriented manufacturing sectors. Progress in terms of poverty reduction and shared prosperity has, however, been slow. In particular, the poverty headcount ratio stood at 15 percent in 2015, and disparities among regions and age groups have persisted or widened.
- 3. In this context, unemployment has remained extremely high, especially for young educated graduates, women, and populations in the interior regions.** Long-standing structural distortions, combined with recent macroeconomic vulnerabilities, have resulted in a private sector that has generated few high-quality jobs. According to the Institute of National Statistics (INS), as at 2018, 33.9 percent of the workforce is employed in industry, 51.7 percent in services, and 13.9 percent in agriculture. In addition, the World Bank (2018) estimates that close to 21 percent of the workforce is vulnerably employed—that is, self-employed without employees or working as unpaid family workers.³ Total unemployment stands at 15.4 percent (2017) and has been much higher among young graduates (30.2 percent), women (23.1 percent), and populations in the interior regions (over 25 percent in the South-West and South-East, compared to 10 percent in the Center-East and North-

¹ This includes four key organizations of the Tunisian civil society: the Tunisian General Union of Labor (UGTT), the Tunisian Confederation of Industry, Trade and Handicrafts (UTICA), the Tunisian League Human Rights (LTDH) and the Tunisian Bar Association. The Quartet received the Nobel Peace Prize in 2015 for its decisive contribution to building a pluralistic democracy in Tunisia following the 2011 Arab Spring.

² Source: IMF.

³ World Bank (2018). World Development Indicators.



East). Significant disparities in labor participation between women and men also exist: in 2017, 25 percent of women were active in the labor force compared to 71 percent of men; and 31 percent of young women were not in education, employment, or training (NEET), compared to 19 percent of young men⁴.

B. Sectoral and Institutional Context

Overall Sectoral Context

4. **Improvements in governance and public service performance are central to Tunisia’s economic, political and institutional continued transition and to a renewal of the social contract.** As noted in the World Bank Performance and Learning Review 2018, the transformation of the Tunisian state will determine in large part the trajectory and pace of the country’s post-revolutionary transition.⁵ Key dimensions of the transformation include: translating policy and legal reforms into concrete implementation so that the impacts are felt by the Tunisian population; transitioning from a state-centric to a private sector-driven economic growth model; transitioning to a citizen-centric administration; building a more fiscally-sustainable and efficient public sector; reducing the administrative burden for businesses and citizens; using public and private sector innovative technologies; deepening transparency and accountability; and, fostering greater inclusion (World Bank, 2018 Report No. 123957-TN). However, there has been a decline in Tunisia’s public sector performance, with its percentile ranking in terms of “government effectiveness” dropping from 63 in 2010 to 51 in 2018 (Worldwide Governance Indicators, 2018)⁶. Similarly, Tunisia’s rank in terms of the “quality of institutions” fell from 23 in 2010 to 75 in 2017 (Global Competitiveness Report, 2018).
5. **The combination of the latest digital technologies with public sector reform innovations offers an important lever for transforming the Tunisian state.** National and sectoral strategies have been developed and implemented to support public sector modernization and digitization. Digital Tunisia 2020 and the Tunisia SmartGov 2020 strategy have a pillar on e-government and a pillar on broadband infrastructure. The e-government pillar aims to *“transform the public administration through the adoption of digital technologies and to ensure greater efficiency and transparency, and a stronger orientation towards citizens and businesses”*. The complementary broadband infrastructure pillar aims to foster *“social inclusion and reduce the digital divide through greater access to information and knowledge, generalizing access to fast broadband, and implementing ultrafast broadband”*.
6. **The Education and Social Protection sectors are government priorities for digital transformation because: (i) critical reforms are needed in these sectors, (ii) the sectors make an important contribution to human development, (iii) the sectors provide services that most citizens use; and, (iv) citizens say that these sectors and services are important for their lives and for their vision of a new state.** The Government of Tunisia (GoT) has an ambitious reform strategy in these sectors:
 - *Social Protection.* The new social protection law (AMEN) – approved by the Parliament in January 2019 – sets a strategic framework to make the social protection system more effective, better targeted and more sustainable, and paves the way for the future expansion of more effective social assistance programs.

⁴ World Bank (2014). Tunisia and the fight for youth inclusion.

⁵ As outlined in the SCD (2015), the CPF (2016) and the recently approved PLR (2018), *“Governance...remain[s] a foundational theme of the CPF”*. References (external literature). Similarly, the most recent IMF diagnostic (2018) notes that, *“strengthening governance and enforcement in the government’s anti-corruption fight...will help unleash the potential of the private sector to generate more opportunity and jobs for all Tunisians”*

⁶ This indicates the rank of a country among all the countries in the world. 0 corresponds to the lowest rank and 100 to the highest rank.



Moreover, the pension reform dialogue has been ongoing to introduce new measures to contain the deficit of pension schemes and improve its coverage by limiting social evasion. For example, new measures were adopted on April 30, 2019 that raised the retirement age to 62 years old (and optional to 65 years old). This aims to achieve a more efficient and inclusive social protection system, towards the establishment of a social floor which guarantees minimum benefits for all through the social assistance system, while additional benefits can be offered through contributive social security system. These strategies have a strong focus on digital transformation by aiming to simplify administrative processes to improve efficiency and the user experience, by improving user identification, user databases, interoperability to improve targeting and service efficiency and by aiming to improve transparency and user-orientation, including through improved grievance redressal.

- *Education.* The sector has a five-year plan envisaging a more efficient and learning-oriented sector that furthers human capital development, which is also underpinned by its strategy on “Digital Schools” (*Plan Stratégique pour l’Ecole Numérique* 2017). The Digital Schools strategy seeks to ensure a digital transformation in the sector to improve service access and quality, including to improve enrollment, school and student monitoring, and digital learning.

7. The Government of Tunisia (GoT) has made progress in these areas, but further progress could be made.

Recent achievements include:

- Enhancing public service delivery through administrative simplification, conversion to e-services in certain sectors, the launch of a national program to develop a Unique Identification system and a National Interoperability Platform, and the expansion of digitized offices where citizens can get assisted access to services (formerly known as Citizen Service Centers);
- Strengthening accountability and user-orientation in service delivery, including through the adoption of the Access to Information Law and the adherence to the Open Government Partnership (OGP);
- Constructing the backbone of more efficient digital services, which includes the expansion of digital technologies, increased broadband coverage, and the establishment of a dynamic local ICT sector. This has included: (i) investments in areas with no network coverage (so-called “white areas”); and, (ii) investments in the national network of the public administration (RNIA), (more than 500 connected administrative offices (RNIA 2017), including ongoing investments to connect more than 700 local municipalities). The GoT has also learnt important lessons from previous investments in connectivity. For example, connectivity investments in the health sector showed the importance of adopting a coordinated approach to providing indoor and outdoor connectivity, the importance of ensuring that connectivity quality meets service delivery needs and the importance of providing connectivity as a service; and,
- The GoT has also laid the foundations for the digitization of the Social Protection and Education sectors, though much further progress could be made. In Social Protection, it has begun work on: the social survey and social identifier to provide better quality services to beneficiaries; the development of a new targeting model to improve beneficiary identification; the development of an updated management information system which is linked with the civil registry database; the piloting mobile service centers to serve groups in remote areas; and, providing outdoor connectivity to all SP offices. However, the efforts will have to continue to make concrete changes and generate positive impacts on beneficiaries of social protection programs. In the Education sector, progress has been made in strengthening school connectivity, in developing a roadmap for a new information system, in improving data exchange and simplified procedures, and in piloting a new online enrollment system for primary and secondary education. The MoE recognizes that it needs to go further and faster.



The Development Problem

8. **Within this context, citizens have identified important challenges at the frontline of service delivery in Tunisia.** Based on a mapping of the citizens’ journey to access services in Education and Social Protection, four flagship areas were identified as particularly important: (i) the social assistance system (cash and benefit transfers⁷); (ii) the social security system (pensions and health insurance); (iii) the digital education management services (including enrollment, student monitoring and drop-out detection); and (iv) the digital learning management system. User experience in these sectors identified various problems (Table 1):
- (i) *Unequal Access.* Certain user groups point to difficulties in getting access. This is especially difficult for vulnerable groups in lagging regions (according to the Regional Development Index, RDI) who may not have the information or means to access the service;
 - (ii) *Poor Quality.* Users complain of poor quality due to long delays and complex service application procedures, which often involve multiple and costly visits to access points; and,
 - (iii) *Weak Accountability and User-Orientation.* Users point to a lack of accurate information on the service and the associated procedures. They point out to limited ways for them to give feedback or to “be heard”. This contributes to low levels of trust between citizens and administration: for example, 51 percent of Tunisians had a negative perception of the administration in 2016 (GoT, DGPR, 2016); or, six out of 10 citizens, in 2018, considered that the government efforts in the fight against corruption were insufficient (Afro barometer Survey, 2019).

Table 1: Flagship Services: What Tunisian Citizens Tell us about User Experience in Selected Services in Tunisia

Key Delivery Event	Operational Focus	Identified Problems from Citizen/User Perspective (non-exhaustive)	Indicative Number of Users of Service
Social Protection			
<i>“I need a social assistance benefit”</i>	Social assistance: cash and benefit transfers.	<ul style="list-style-type: none"> • Unequal access: long waiting lists due to program budget constraints, unused quota, and targeting errors. • Time-consuming/costly access: lengthy and paper-based application processes requiring multiple visits to service provider facilities. • Weak transparency: lack of information on eligibility/procedures; and lack of mechanisms to track requests. • Poor user-centricity: complex procedures and limited feedback/complaints mechanisms; limited payment options. 	Primary beneficiaries: poor and vulnerable households. <ul style="list-style-type: none"> • 285,000 beneficiary households of the National Program for Needy Families (PNAFN) which provides cash transfer and access to free health care. • 650,000 beneficiary households of subsidized health care cards.
<i>“I need social security benefits”</i>	Social security: pensions and health insurance	<ul style="list-style-type: none"> • Unequal access: limited service delivery channels, especially in remote regions. • Time-consuming/costly access: lengthy and paper-based application processes requiring multiple visits to service provider facilities. • Weak transparency: lack of proactive communication on citizen rights and benefits (old age, disability, supplementary pension, death, family allowances, health insurance). 	Primary beneficiaries: workers who are not currently covered under the social security scheme. <ul style="list-style-type: none"> • 450,000 self-employed workers (90% of 510,000 self-employed workers) without social security, including farmers or workers in agricultural sector.

⁷ Cash transfer programs (i.e. PNAFN – Programme National d’Aide aux Familles Nécessiteuses) and Health Insurance Program which are free and subsidized health care cards (Assistance Médicale Gratuite (AMG1) et Carte de Soins à Tarifs Réduits (AMG2)).



		<ul style="list-style-type: none"> • Poor user-centricity: rigid rules and limited options for payment of contribution fees (modality and frequency). • Weak authentication of beneficiaries of health insurance programs (particularly for free/subsidized cards). • Time-consuming: processes can be lengthy in confirming the eligible benefits and health services. 	<ul style="list-style-type: none"> • Primary beneficiaries: health insurance beneficiaries with new digital card (90% of population (estimated)).
Education			
<p><i>“I need to enroll my child in primary or secondary school; to follow his/her schooling and improve his/her learning”</i></p>	Digital Education Management Platform	<p><u>School enrolment at primary and secondary level</u></p> <ul style="list-style-type: none"> • Poor user centricity: lack of adaptation to the needs of specific groups (ICT barriers, access to connectivity). <p><u>Monitoring of student and school performance</u></p> <ul style="list-style-type: none"> • Lack of proactive communication between parents and schools. • Lack of parental access to consolidated information on student performance (learning evaluations, exams, attendance). • Fragmented back-office business processes and system. <p><u>Student learning development and risks</u></p> <ul style="list-style-type: none"> • Weak monitoring system for identifying potential students at risk of learning difficulties, including risk of drop-out. • Lack of data, poor data quality, and weak link to the student register and identifier. • Fragmented back-office processes: detection and follow-up systems are lacking; weak coordination and follow-up across ministries. 	<p>Primary beneficiaries: students, parents and teachers.</p> <ul style="list-style-type: none"> • 190,000 students enrolling in grade 1 in 2019 of which 170 000 through online enrollment procedure. • 906,000 students enrolling in 2019 in secondary education.
	Digital Learning Management System	<ul style="list-style-type: none"> • Lack of accessible and quality online (and face-to-face) learning tools for students to catch up on learning lessons. • Lack of access to digital learning tools (via computer or interactive portals). • Teachers who do not have access to digital materials to complement lesson plans and introduce new pedagogy. 	<p>Primary beneficiaries: students</p> <ul style="list-style-type: none"> • Number of primary students: 1,100,790 (2018) • Number of secondary students: 894,305 (2018) • 140,000 teachers in primary and secondary education (in 2018)

9. **The problems that users have identified are rooted in three interrelated causes.** These causes are: (i) complex service delivery procedures and a lack of appropriate service delivery mechanisms; (ii) public and private sector and civil society difficulties in identifying service users (absence of good quality master data lists) to foster their engagement and change management; and (iii) challenges in providing higher-quality services due to broadband connectivity difficulties. Each cause is briefly summarized below.

10. **The first cause of the problems identified by the user relates to complex and inefficient service delivery procedures and a lack of appropriate service delivery mechanisms in the Social Protection and Education sectors:**

- The social assistance delivery system is reliant on complex administrative processes and fragmented



information and data management systems for monitoring and decision-making. There is also a lack of tools and mechanisms to adapt service delivery to beneficiaries needs (e.g. disabled persons or women): (i) steps to receive cash transfers are complex and digital payment options are limited; (ii) limited options for signing up to or paying pension contributions; and, (iii) there is a slow processing of poor citizens' health insurance claims. The sector could also strengthen its mechanisms for identifying beneficiaries and tracking their applications to ensure both a simpler experience for the users and a more manageable workload for social workers.

- The education delivery and administrative system is also characterized by a reliance on paper-based and manual procedures, complex administrative processes and weak information management systems for management decision-making. There are also a lack of user-friendly mechanisms and channels for users to access key services: (i) weaknesses in the enrollment system and a lack of tools for monitoring student progress and detecting students “at risk”, compounded by poor communication between parents and schools, which limits transparency and accountability; and, (ii) limited availability of, and access to, quality learning tools and materials for teachers and students. These administrative inefficiencies also contribute to sub-optimal learning outcomes, where there are continued weaknesses in terms of access to preschool education, high drop-out rates in secondary education and limited quality of education more broadly.
- In both sectors, there is also a need to improve service access points – physical and digitized – to improve access to high-quality services for all and especially for vulnerable groups. The GoT has made progress in this area (Box 1), but there are three issues that need attention. First, there is a need to complement digital service access with physical or “assisted” access. Some citizens need human-assisted access to services, such as low-income groups, illiterates or the disabled, not least because of their low levels of ICT literacy. Moreover, limited internet access is especially prevalent among poorer households in rural areas: broadband Internet coverage was 7 percent among rural households in 2015, compared with 38 percent among urban households. Second, there are regional imbalances in terms of service coverage. In 2016, around two-thirds of sub-national administrative regions (the *délégations* covering 6 million people) has access to less than 50 percent of priority services. There is therefore a need to improve existing access points and ensure their sustainability, and to expand these access points in the under-served areas. Third, one key barrier to improved service access is a lack of information – on the part of citizens (and especially vulnerable citizens) – about the services available to them.

Box 1: Progress, Challenges and Strategy for Digitized Access Points in Tunisia

Background: Government Initiatives to reduce service access constraints and address the Digital Divide

In 2009, the GoT began experimenting with the installation of citizen service centers (CSCs) across the country with the objective of increasing citizen access to administrative services. Today, there are 50 operational CSCs that provide access to different services (e.g. documents/certificates, general assistance, change of address, application for membership, loan application, etc.) managed by 10 government service providers (selected following a nation-wide survey administered by the Presidency of Government in 2016). The service providers within the CSCs are: the Tunisian Company of Electricity and Gas (STEG), National Society of Exploitation and Distribution of Water (SONEDE), Tunisia Telecom, Tunisian Post Office, the municipality, Tax Collection Offices, the National Health Insurance Fund (CNAM), the National Social Security Fund (CNSS), the National Retirement Fund (CNRPS) (which are structures attached to the Ministry of Social Affairs) and the National Agency for Employment and Self-Employment (ANETI).

The experimentation phase has highlighted important lessons: (i) absence of a legal and institutional framework : CSCs operate on an ad-hoc basis through a framework memorandum of understanding signed between the government and government service providers; (ii) understaffing and civil service management constraints contributing to high staff attrition and low staff capacity; (iii) poor business models and financial arrangements undermining sustainability of the model; (iv) lack of interoperable back-office systems amongst service providers which weakens service quality (long delays, and high transaction costs); and (v) slow adaptation to digital transformation plan of the government and future needs of citizens.



New vision: First Generation Digitized Access Points to improve service access and quality to citizens, notably in rural areas and to vulnerable groups

The government's new action plan (2019) rests on digitizing existing access points and rolling out at least 69 access points to provide human-assisted access including but not limited to the following services: (a) social assistance application; (b) social security enrollment and updates; (c) health insurance enrolment; (d) assisted school enrollment. Access to other administrative services, which can be delivered through such access points will also increase (where feasible and appropriate).

The operation will support the deployment of digitized access points in determined geographic areas (to be listed in the operations manual) that will cover around 2 million citizens. The operation will support the government's shift to a multi-channel, digitized and integrated public service delivery model by supporting a new generation of digitized access points that will also help reduce the digital divide. These will take the form of three models that will be deployed selectively depending on local access needs: (a) stationary access point with multiple single-service windows (30); (b) stationary access point with single multi-service window (25); and, (c) mobile access point with single or multiple service windows (14). (See Component 2).

11. The second cause, which impacts directly on the first, relates to the need to strengthen public and private sector capabilities to foster a more responsive, user-oriented and coordinated approach to the modernization and digitization of the Social Protection and Education sectors. Five interrelated areas are important:

- *There is a lack of reliable and real-time data on the users within and across sectors.* This slows down user identification, which in turn slows down service access, quality and targeting. Relatedly, there is a need to ensure that sectoral initiatives are linked to, and better aligned with, the new national program for interoperability and identification. This is needed because, with no data exchange, each sector needs to collect and validate its own information, which duplicates efforts and costs, which translates into slower delivery at the frontline;
- *There are limited mechanisms for strengthening accountability and citizen engagement.* This contributes to an unresponsive delivery system. There is a need to: (i) simultaneously strengthen internal government ("supply side") accountability mechanisms – through better monitoring of service quality – and external societal ("demand side") accountability – through information disclosure and citizen engagement; and, (ii) to close the accountability loop by ensuring that citizen feedback leads to improvements in service delivery. This will create greater incentives for service improvements, which leads to the next point;
- *There is a need to further strengthen the capacity, coordination and incentives of the public sector to implement the modernization and digitization of the flagship services.* Areas that need greater attention: (i) strengthening the technical capacity of the public administration – and improving the involvement of the private sector – in developing, adopting and implementing new digital and institutional innovations; and, (ii) strengthening change management and incentives for change (see risk section). In the UN e-government Index (2018), Tunisia's ranking has moved from 73 in 2016 to 80 out of 193 countries. This will require concerted support, plus the adoption of a targeted, realistic and well-sequenced approach to the change process. Results-based lending programs would also help create further incentives for change.
- *There is a need to create greater opportunities for the private sector to improve internet connectivity, to participate in solving public service problems and to provide innovation.* This would foster better and quicker innovation and reduce the burden on a stretched public sector. Key areas that need attention: stimulating private sector investment (for example in connectivity); creating public sector data platforms to spur private sector activity; building public-private collaboration in digital solution development; and supporting a modern, private-sector "GovTech" regulatory environment.
- *Finally, there is a need to further strengthen the enabling environment, in targeted areas, for improved private sector participation and for the accelerated implementation of user-centric public services.* There is ongoing policy, legal and regulatory reform processes that are complementary but *not* within the scope



of this operation, such as the new Data Protection Law or other, overarching Telecoms regulations. In the context of this operation: (i) there is a need to establish a Digital Agency to manage the digital transformation and to pass the new Digital Law to improve private sector investment and competition in the telecoms sector and to accelerate public sector digitization by, amongst others, strengthening digital trust, information security, and interoperability; (ii) there is a need to further enable public service performance, accountability and access through establishing the Open Data Legal Architecture and strengthening the legal framework on digitized access points; and, (iii) there is a need to reform the enabling environment to incentivize a more coherent, optimal and private-sector-led approach to expanding broadband connectivity coverage in general and for schools, social protection offices and digitized access points, by updating the National Broadband Plan (including the new Digital Infrastructure Plan), by integrating this national approach into an updated schools connectivity strategy and by mobilizing additional public and private resources to meet school connectivity needs for optimal service delivery (see the next cause).

12. The third cause relates to the inequitable access to and weak quality of broadband connectivity at the level of frontline service providers and users. This is a critical third layer of the service delivery problem in Tunisia for three main reasons. First, a lack of connectivity at the level of frontline service providers perpetuates a reliance on paper-based and manual processes. These manual processes, as noted above, increase transaction costs and slow down the handling and processing of service applications and delivery. Second, weak connectivity limits the adoption of new institutional and digital solutions, such as simpler and user-friendly approaches to applying for a service. This is a missed opportunity, as these solutions can improve access, quality and accountability of the flagship services supported under this operation. Third, unequal connectivity reflects and sustains the “digital divide”. Connectivity challenges tend to be most acute in the poorer and less economically prosperous parts of the country; so-called “lagging regions”. Moreover, in the same regions, there is unequal access to high-quality Education and Social Protection services, especially for vulnerable groups. Therefore, Digital Tunisia 2020 seeks to foster improved social inclusion by generalizing access to knowledge, information and fast broadband.

13. A mapping of connectivity challenges in the Social Protection and Education sectors presents a varied picture. Overall, connectivity difficulties persist in terms of: (i) a lack of network coverage for frontline service providers (i.e. outdoor connectivity); (ii) a lack of broadband connectivity and ICT equipment to ensure that service providers can use internet services within their premises (i.e. indoor connectivity); and, (iii) challenges in terms of the quality and maintenance of IT services (i.e. availability, service quality, bandwidth). More specifically, the following problems are present:

- *Ensuring connectivity meets service delivery needs.*
- *Education sector.* Schools were categorized according to their connectivity status (Table 2). There exist several solutions to meet the different needs of schools according to each category. Following a connectivity feasibility diagnostic, an action plan will be developed and adopted to help determine the most appropriate solutions for each category of schools. This will include: (i) a dynamic map of schools connectivity status, (ii) an update of service level agreements (SLA) standards (including bandwidth provision per student or per site, opportunities to use schools as access points for local communities, monitoring and payment conditions), (ii) functional and technical specifications, and a multi-phased procurement proposal (which includes strong prioritization and sequencing, and the deployment of appropriate connectivity solutions).



Table 2: Typology of schools by connectivity status

Zone	Current school coverage	Number of schools ⁸
ALPHA (urban)	Fiber (mostly)	700
BETA (peri-urban)	ADSL	2,307
GAMMA (rural remote)	3G/4G	2,593
		[* 3G/4G in β and γ]
WHITE AREA	Not covered	57 ⁹

- *Social Protection sector.* While all Social Protection offices already have outdoor connectivity, its quality varies and needs upgrading. Therefore, the needs in the Social Protection sector relate to the need to provide better indoor connectivity which meet the adequate service standards to 250 Social Protection offices, located across more than 200 under-served districts.
- *Digitized Access Points.* Existing digitized access points are housed in existing premises with outdoor and indoor connectivity. However, to ensure service access in the under-served regions, 55 new stationary digitized access points – which will be set up in existing premises – would require indoor connectivity equipment and services.
- *Improving outdoor connectivity modalities and delivery mechanisms by private sector.* Considering the telecoms landscape in Tunisia, new connectivity investments to serve such service providers will also need to address the following:
 - First, it is imperative to ensure the maximum coherence between national and sectoral (use cases) connectivity initiatives.
 - Second, there is a need to boost private sector financing for development. Connectivity solutions will be provided by the private sector. However, there is a role of public policy and investment to address the following: to provide necessary incentives to ensure that the private sector strengthens connectivity in the most lagging and “white zones”; to provide incentives and regulation to ensure that connectivity is provided as a complete service so that providers have a full package of high-quality services with no stranded assets; to ensure that connectivity contracts for the private sector when linked with deploying fiber optic infrastructure are won and managed in an open, competitive and efficient manner through a wholesale approach and through “open access” to outdoor connectivity infrastructure; and, to strengthen the enabling environment to ensure a more open and competitive connectivity sector.
 - Third, there is a need for dedicated attention to improving the connectivity of frontline service providers in lagging regions, to address the digital divide and the weak access to services of vulnerable populations.
 - Fourth, there is a need to ensure that additional public and private resources are allocated to school connectivity in Tunisia, including through the ICT Development Fund, which is currently contributing to the financing of national ICT infrastructure and connectivity projects, for example the “white areas” and the national network of the public administration (RNIA) projects.

⁸ Numbers will be reverified by effectiveness in light of the ongoing education connectivity study.

⁹ Number to be reverified before effectiveness.



C. Relevance to Higher Level Objectives

14. **In response to these challenges, the operation seeks to support the GoT in improving equitable access to and the quality and accountability of flagship services in the Social Protection and Education sectors through a GovTech approach.** A "GovTech" approach has two core elements: (i) putting the citizen at the center of the reform process; and, (ii) combining public sector innovative reforms, change management and digital technologies.

15. **The operation is fully aligned with the achievement of core GoT priorities:**

- *Strategy for Development and Economic Reform.* The GoT reform agenda is set out in the *Note d'Orientation Stratégique*¹⁰, and the *Five-Year Development Plan (FYDP)* for 2016-2020. The FYDP focuses on: (1) financing the economy; (2) fiscal consolidation including public sector reform; (3) human capital development; (4) redesign of the social security system; and (5) business climate and private sector investments. The operation contributes to objectives 2, 3 and 4. The Prime Minister has called for digitization to accelerate these reforms and boost economic growth. He has declared digitization of the Tunisian public administration and economy as one of the top three priorities for Tunisia in the *Development Roadmap 2019*.¹¹
- *Strategy for Digitization.* Linked to the national development strategy, PNS and the *SmartGov 2020 Strategy*, aim at using digital technologies to accelerate socio-economic development, and to make Tunisia an international leader in digitization. The operation supports two complementary pillars of this strategy: (1) the pillar on E-government/GovTech seeks to “transform the public administration through the adoption of digital technologies and to ensure greater efficiency and transparency, and a stronger orientation towards citizens and businesses”; and, (2) the pillar on broadband infrastructure aims to foster “social inclusion and reduce the digital divide through greater access to information and knowledge, generalizing access to fast broadband, and implementing ultrafast broadband”. These strategies complement existing strategies on the modernization of the public administration and public service delivery system in Tunisia, namely the *Strategy for the Modernization of the Public Administration (2017)* and the *Strategy for Civil Service Reform (2017)*. These strategies have also been translated into government “action plans” that lay out the priority actions and sequencing for 2019 and 2020; a number of these actions are integrated into this operation.¹²
- *Social Protection and Education Strategies.* The operation is fully aligned with the strategies in these sectors, as outlined in Section B above.

16. **The operation is fully aligned with the World Bank country-level and global corporate priorities:**

- *WBG Twin Goals.* The operation is expected to contribute to the achievement of World Bank Group’s strategic goals of ending extreme poverty and boosting shared prosperity in a sustainable manner by improving the access to and quality of services that enhance socio-economic wellbeing and human development. It has a focus on shared prosperity by focusing on service delivery in poorer areas and on

¹⁰ Following the 2014 presidential and parliamentary elections, the Government developed a concept note, the *Note d'Orientation Stratégique*, for a 2016-2020 development plan. The *Note d'Orientation Stratégique* was organized around five strategic pillars: (a) good governance; (b) a dynamic “hub” economy; (c) human development and social inclusion; (d) regional development; and (e) green growth. The Note was followed by the *Five-Year Development Plan*, approved by Parliament on April 12, 2017.

¹¹ <https://www.leaders.com.tn/article/26078-la-feuille-de-route-2019-de-youssef-chahed>

¹² These action plans are supplemented by “livres blancs” notes synthesizing the action plan, the larger objectives of the work being embarked on, and donor involvement in the areas of (a) HR mobility/redeployment; (b) simplification of administrative services for citizens and businesses; (c) citizen service centres; and (d) digitalization. These action plans have been endorsed by the Minister of Major Reforms and will be approved by a Ministerial Council in May 2019.



improving access to services for the more vulnerable segments of the population.

- *Enlarged MENA Regional Strategy*. The project is aligned with the core elements of the enlarged MENA strategy and is emblematic of an expanded approach that harnesses the potential of digital technologies to improve equitable access to, and the quality of, public services. Restoring public trust and credibility in the public provision of social assistance and the effective management of education services will be instrumental in renewing the social contract between citizens and the state. Digital technologies provide a powerful means of reshaping the culture of public service in Tunisia. The project takes important steps to center public service delivery around the needs of citizens, reducing time and cost in accessing services while increasing equity of access, transparency and accountability. Progress and experience in this operation will serve as a model for broader application in Tunisia and in other countries in the MENA region and beyond.
- *Tunisia Country Partnership Framework (CPF)*. The operation is fully aligned with the Tunisia Country Partnership Framework (FY2016-2020), recently re-validated and extended by one year, through the Performance Learning Review (PLR) (2018). It supports an overarching objective of building a new social contract. It also supports the three pillars: it supports pillar one on fiscal efficiency by improving efficiency in the selected sectors; it supports pillar two on addressing regional disparities by improving access to, and the quality of, services in under-served regions; and, it supports pillar three on social inclusion by targeting vulnerable groups. The operation also contributes to improvement in human development services, thus contributing to the Human Capital initiative.
- *Maximizing Finance for Development (MFD)*. The operation respects and promotes the principles outlined in the MFD corporate policy by: (i) incentivizing a GovTech policy environment that promotes a modern, private sector oriented approach (such as the Digital Law); (ii) incentivizing private sector participation and innovation by bringing in private sector expertise to support digital solution development and by creating open data platforms for private sector analytics enterprises; (iii) stimulating private-sector connectivity investments; (iv) procuring solutions on an infrastructure and software as a service basis; and, (v) placing emphasis on fit-for-purpose and value-for-money technologies. These points are also reflected in the Program Procurement Strategy Document (PPSD).
- *Other Corporate Priorities*. The project operationalizes the corporate priorities on GovTech, as well as on the Digital Economy for Africa (DE4A) and MENA Tech Initiative. Digital technology brings opportunity, paving the way to create new jobs, increase productivity, and improve public services. Yet it is rarely sufficient as outlined in WDR 2016 on “Digital Dividends”. It should be coupled with addressing institutional bottlenecks, undertaking business process reengineering, pro-actively involving relevant stakeholders, including public servants and addressing issues of the digital divide (see also WDR 2017 on Governance and Law).

II. PROJECT DESCRIPTION

A. Project Development Objective

17. **To address the above-mentioned problems, the project development objective (PDO) is to improve equitable access to and the quality and accountability of selected Social Protection and Education services through a GovTech approach.**

- Access will be measured in terms of: (i) number of functioning access points for the selected public services; and, (ii) increased usage of the public services selected by beneficiaries. Gains in



equitable access will be measured in terms of two dimensions: (i) improved social protection systems (which in themselves improve the ability of the GoT to identify and serve needy groups); and, (ii) access for targeted vulnerable groups: (a) low-income groups; (b) women in rural areas; (c) illiterates; and (d) disabled people.

- Quality will be measured in terms of: (i) user satisfaction; and, (ii) time/efficiency gains in delivery.
- Accountability will be measured in terms of: (i) increased availability of sector and service-related information; and, (ii) increased responsiveness of public service providers to user feedback.
- A GovTech approach has two core elements: (i) putting the citizen at the center of the reform process; and, (ii) combining public sector innovative reforms, change management and digital technologies.

18. **Progress towards the achievement of the PDO will be assessed using the following PDO indicators.** The data will be generated drawing from administrative data and targeted data provided by service users. Certain baselines will be reverified during year one. The intermediate indicators are outlined in the results framework.

Equitable Access

- **PDO 1: Increased access to the targeted Social Protection Services (Social Assistance and Social Security)¹³.** The annual target values result from the sum of the annual target values of two sub-indicators: i) number of households (applicants and beneficiaries) eligible for social assistance according to the new targeting process; and, ii) number of new social security affiliations among the target population.
- **PDO 2: Increased access of “target vulnerable groups”¹⁴ to digitized access points.**

Quality

- **PDO 3: Increased user satisfaction¹⁵ on social assistance, online enrollment and Digital Learning Management System.**

Accountability

- **PDO 4: Published barometer reports on the flagship services (Social Protection and Education) and ministerial decisions taken based on report recommendations.**

19. **The following beneficiaries will be targeted through the project:**

- *Primary beneficiaries:* these are the end-users of the selected services who will benefit from improved access and quality. Special attention is given to groups with particular difficulties in accessing the selected services and in making their voices heard in service delivery. This includes: (a) low-income groups; (b) women in rural areas; (c) illiterates; and (d) disabled people.

¹³The beneficiaries of these two services belong to a vulnerable population of low-income people. Thus, with regard to social security, the target population includes the self-employed, including the poor and vulnerable, who have very limited income and are currently not covered by any social security, including agricultural workers.

¹⁴ Target vulnerable groups, in addition to low-income groups are: women in rural areas; illiterates; and disabled groups.

¹⁵ Satisfaction could be measured on the 5-point scale from “Very Unsatisfied” to “Very Satisfied.” The parameters will be clearly defined to ensure simple measurement and attribution to the project investments (for example, very focused questions such as: do you find the resources you need on line?). The GoT is aware of the strengths and limitations of user satisfaction surveys. It is also aware that this is one of many metrics. It is also aware that action needs to be taken to improve user satisfaction.



- *Secondary beneficiaries*: these include: (a) the government agencies involved in the operation (including line Ministries, civil servants at national and regional level in the administrations) that will benefit from improved systems; and, (b) public and private sector agencies with a stake in the GovTech ecosystem.

B. Project Approach and Components

20. **In response to the development problems, the project complements existing investments in Tunisia by operationalizing a GovTech approach that has two core elements: (i) putting the citizen at the centre of the reform process; and, (ii) combining public sector reform innovations, change management and digital technologies.** This approach aims to: (a) put the user at the centre of service delivery reforms; (b) combine public sector reform innovations with change management and fit-for-purpose digital technologies; (c) enhance equity by strengthening the efficiency and quality of services, and by ensuring multi-channel delivery – e-access and assisted access – to address the digital divide; (d) improve public sector performance and citizen trust by enhancing citizen participation, transparency and accountability; (e) develop public sector platforms to facilitate the emergence of innovation and to provide opportunities for private sector growth and innovation; and, (f) proceed in iterative phases, ensuring learning and impact before wider digitization of the public administration (World Bank, 2018). International and Tunisian experience suggest a strong potential for GovTech to address the identified problems.
21. **Based on the project’s Theory of Change (see page 31) and preparatory diagnostics (see background Technical Notes)¹⁶, the activities are structured around three mutually-reinforcing components (Figure 1).** The components focus on the Social Protection and Education sectors and four flagship areas: (i) the social assistance system (cash and benefit transfers); (ii) the social security system (pensions and health insurance); (iii) the digital education management platform (enrolment, student/school monitoring and drop-out detection); and, (iv) the digital learning management system. It is also expected that the project investments will have spillover effects by building common public sector capabilities and systems to enable a more rapid digitization of *other* sectors and services in the future:
- Component 1 focuses on simplifying, digitizing, and optimizing key administrative processes and introducing user-friendly digital and institutional solutions to improve user access and experience, and to address the digital divide on the demand side.
 - Component 2 complements Component 1 by building the public and private sector capabilities for speedier and more responsive service delivery. It does so by enhancing user identification, improving citizen engagement, implementing change management and incentivizing critical reform uptake.
 - Component 3 enables the accelerated adoption and implementation of the solutions provided under Components 1 and 2. It enables improved access, quality and accountability of the selected services by addressing the indoor and outdoor connectivity needs in targeted Education and Social Protection service provider facilities, and to address the digital divide on the supply side.
22. **A central element of the operational design is to create opportunities for private sector activity to spur innovation, to improve services and to reduce the burden on public sector systems and capacities.** The main ways this will be done in the operation include: (i) procuring digital solutions, infrastructure and software “as a service” from private providers; (ii) adopting fit-for-purpose and value-for-money technologies; (iii) incentivizing a policy environment that promotes a modern, private-sector oriented approach (such as the

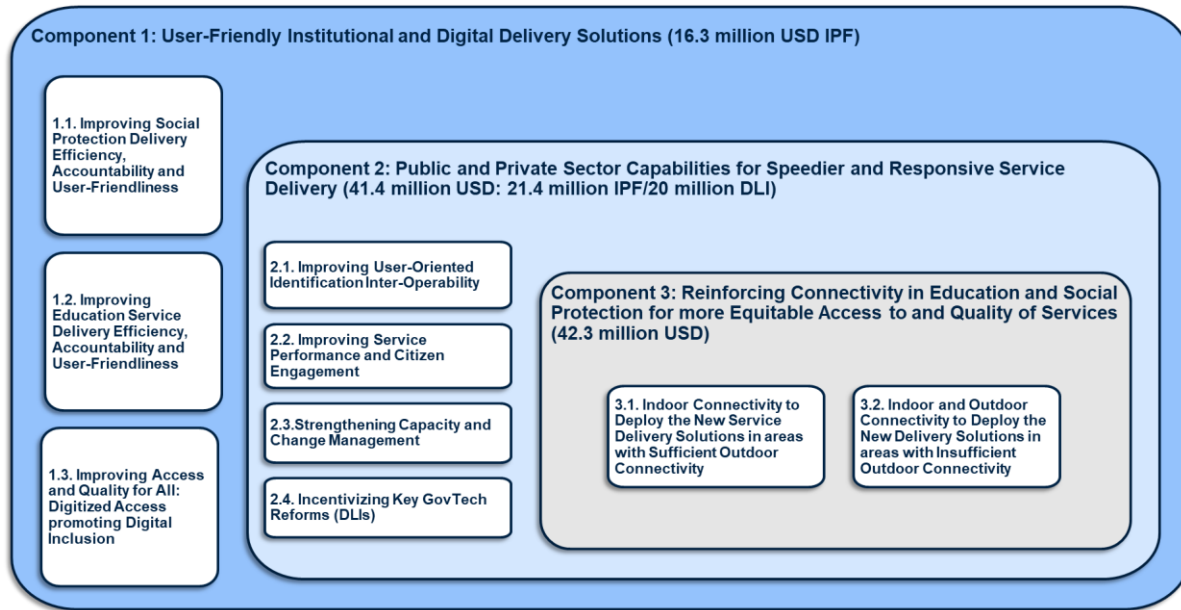
¹⁶ See Technical Appraisal Notes produced during project preparation: Note 1 Service Delivery in Tunisia; Note 2 Risks; Note 3 Connectivity



Digital Law); (iv) incentivizing private sector participation and innovation by bringing in private sector expertise to support digital solution development and by creating open data platforms for private sector analytics enterprises; (v) stimulating private-sector outdoor connectivity investments. These points are reflected in the components and the Program Procurement Strategy Document (PPSD).

23. To achieve the PDO and to respond effectively to the identified problems, this operation includes **Disbursement Linked Indicators (DLIs) (20 percent)**. The rationale for this approach is that it allows for disbursement against eligible expenditures as well as the verified achievement of specific products or services considered essential to meeting the PDO. Specifically, this will enable closer management of complex and high-value investment contracts, which are critical to the PDO. A complementary results-based component is necessary because impact is greater where there is a *combination* of technological inputs and targeted incentives for institutional change. Moreover, given the weaker incentives for reform in certain areas, the DLIs are used to incentivize reform *adoption* and *implementation*.

Figure 1: Component Summary



Component 1. User-Friendly Institutional and Digital Delivery Solutions (US\$16.3 million)

24. This component aims to simplify and digitize key administrative service delivery processes and introduce user-friendly institutional and digital solutions to improve user access and experience, and to address the digital divide. This component addresses the first root cause of sub-optimal service delivery (Section B) by supporting: (i) change management to support the design and uptake of user-friendly solutions to identified delivery problems; (ii) simplification and digitization of selected administrative bottlenecks in the delivery chain in order to reduce the time, complexity, documents requested and visits for accessing the service; (iii)



user-friendly digital applications for service users in order to ensure easier access to services¹⁷; and, (iv) rehabilitating and expanding digitized access points in order to improve access for all and for vulnerable groups. A dedicated program of change management (under Component 2.3) will be financed and implemented to support the development, uptake and implementation of the new GovTech solutions described under this component. Activities are divided into three sub-components.

25. *1.1. Improving Social Protection Delivery Efficiency, Accountability and User-Friendliness (US\$ 8.5 million)*. This sub-component focuses on implementing GovTech innovations to improve the overall social protection delivery system. This will enable the future improvement of all social assistance programs and will specifically improve the delivery of the social assistance and social security systems

- *Social Assistance: Cash and Benefit Transfers (US\$4.3 million)*. This focuses on the delivery of social assistance transfers and benefits (including the National Programme of Assistance to Needy Families (PNAFN) and the Indigent Health Insurance Program (free and subsidized health services) for the neediest groups (AMG1 and AMG2)). The main activities are: (i) an “As-is-to-Be” review of administrative processes and the implementation of measures to simplify and/or digitize relevant processes to make them more efficient and user-friendly; (ii) operationalizing the new targeting method and upgrading the information system to improve efficiency in identifying and serving beneficiaries, to provide better quality information for delivery decisions and to strengthen the backbone for high-quality digital services¹⁸; and, (iii) stimulating GovTech solutions for the users and providers in priority areas (Table 3).
- *Social Security: Pensions and Health Insurance (US\$4.2 million)*. This focuses on the sustainability and coverage of social security benefits and the quality of delivery for target low-income groups. The main activities are: (i) undertaking an “As-is-to-Be” review of administrative processes and implementing measures to simplify and/or digitize relevant processes to make them more efficient and user-friendly; (ii) upgrading the information system to speed up digital services, to make the pensions enrollment process more efficient and to improve detection of under-reporting¹⁹; (iii) expansion of new social protection / universal health care cards to strengthen the authentication of beneficiaries in accessing health insurance and services; and, (iv) stimulating GovTech solutions for the users and providers in priority areas (Table 3).
- *Leveraging other programs and investments in the sector*. The operation will not finance devices for end-users but will do the following: (a) it will finance a limited number of tablets, through a service contract, for social workers to undertake and complete the social survey; and, (b) the MSA will mobilize its internal financing and other donor investments (such as the planned investment by the Millennium Challenge Corporation) to provide needed devices at the level of the SP offices. The project will leverage investments under the Social Protection Reform Support Project (PARPS, US\$4.7 million, closed in June 2019) to continue the modernization of the social protection delivery system and to facilitate the accelerated adoption of the above-mentioned reforms and solutions. For example, the social survey has been completed for about 330,000 households, and this operation is expected to support the evolution of the registry database, by covering not only all current beneficiaries (900,000 households) but also applicants. Hence, the operation finances operating costs (transportation for household visits) and a limited number

¹⁷ CivicTech innovations offer tried-and-tested technologies to: (i) ease access to service-related information, (ii) facilitate better access to services; and, (iii) increase citizen engagement and government responsiveness (if the conditions are right). It capitalizes on classic devices (smartphones, tablet computers), and social media, interactive totems, panels and monitors.

¹⁸ This includes developing a targeting model using artificial intelligence and machine learning to maximize the accuracy to predict the welfare level of applicants/beneficiaries and integration of the targeting model into the new operational procedures. This will include a system to monitor and recertify beneficiaries (including development of a case management system to provide customized services to individual persons).

¹⁹ This includes through improved data exchange between the Ministry of Finance and the National Pension Fund (CNSS)



of tablets and will leverage the trained social workers and 1,600 tablets purchased under the PARPS. For targeting, the development of a model is underway, and this project will focus on the improvement and full operationalization of the model. For pensions, the PARPS financed the assessment of selected procedures for the pension system and the recommendations from these assessments are expected to provide direct inputs to this project. Lastly, the project will support the expansion of new digital cards (activity (iii) in the previous paragraph), by fully capitalizing on the government's own innovative initiative to revamp the health insurance system (CNAM SEEDS).

26. 1.2. *Improved Education Delivery Efficiency, Accountability and User-Friendliness (US\$4.6 million)*. This sub-component focuses on applying GovTech innovations to improve selected aspects of the education delivery systems, in general, and the specific delivery of targeted services related to the digital education management platform (enrollment, student/school monitoring and drop-out detection) and the digital learning management system.

- *Digital Education Management Platform and Services (US\$3.1 million)*. This focuses on education management efficiency, accountability and user-friendliness through simplifying and digitizing key administrative processes and introducing user-friendly digital and institutional services. The main activities are: (i) undertaking an “As-is-to-Be” review of administrative processes and implementing measures to simplify and/or digitize relevant processes to make them more efficient and user-friendly; (ii) upgrading the Education information system, which will support the implementation of the new GovTech solutions and improved information for management decisions; and, (iii) stimulating GovTech solutions for the users and providers in priority areas (Table 3).
- *Digital Learning Management System (US\$ 1.5 million)*. This sub-component aims to improve student, teacher and inspector access to, and usage of, high-quality learning materials and services through the design and implementation of a Digital Learning Management System. To complement existing investments in this area,²⁰ the main activities under this operation are: (i) developing and implementing a databank and network for channeling, curating and accessing the digital learning material; (ii) designing, testing and deploying business models to spur the creation of relevant and useful digital pedagogical content for schools (existing content, localizing available content, copyrights purchase, and so on); and, (iii) stimulating GovTech solutions for the users and providers in priority areas by developing and expanding digital learning resources for teachers, school inspectors and students, by stimulating the public and private sector to produce content and by stimulating investment in user-friendly tools to enhance the learning experience (Table 3).
- *Leveraging other programs and investments in the sector*. Component 1 investments will also leverage the World Bankfinanced project “Strengthening Foundations for Learning Project” (PREFAT) (US\$ 100 million). The PREFAT, currently under implementation, seeks to improve the learning environment in primary public schools. PREFAT supports the development and delivery of digitized services to: (i) improve teacher pedagogical skills and content knowledge; (ii) improve the quality of instructional support provided by primary school inspectors and pedagogical counselors; and (iii) promote literacy-rich classroom environment. Component 1 of the GovTech operation will complement and leverage the PREFAT operation in the following ways. First, the GovTech operation will provide new platforms for education management and learning management. PREFAT will provide content that will be adopted in these platforms. Second, the GovTech operation will develop, pilot and test innovative digital learning content that could be adopted and scaled via the PREFAT operation. Third, close coordination between

²⁰ Additionally, the project will ensure coordination with complementary operations financed by the World Bank and other donors (AfDB/EU/UNICEF) working specifically on the areas of curriculum reform, pedagogical reform, teacher training and assessment.



GovTech and PREFAT will be assured by National Center for Technology in Education (CNTE). The CNTE is responsible for the development and coordination of all education digitized services under both the PREFAT and GovTech. The CNTE works in close collaboration with the education and training divisions of the MoE to define the scope and design of digitized services. Through both Projects, the CNTE will carry out calls for tenders to recruit consulting services from the private sector to develop and test the new solutions. The CNTE has a team of experienced engineers available to support this process. Fourth, the GovTech operation will be able to leverage the provision of devices under PREFAT. The CNTE through the PREFAT will procure several thousands of tablets that will be distributed to primary school teachers, advisors and principals to support the introduction of the new education digitized services. The tablets will also be used by beneficiaries for the new applications developed for the education management platform under Component 1 of this operation. The CNTE will monitor the impact of the tablets on the adoption of digitized services and satisfaction of users. Additional devices will be procured from the Ministry budget and other donors (see Component 3).

Table 3: Summary of key user-oriented GovTech solutions under Component 1

Sub-Component	Problem	GovTech solution to be developed and implemented under Component 1
Social Assistance: Cash and Benefit Transfers	<i>Manual and inflexible payment modality.</i>	A digital cash transfer payment system to ease transfers.
	<i>Slow paper-based process</i>	Digital identification of beneficiaries of health insurance to speed up their access to care services with reliable and faster authentication, verification of eligibility and prompt processing and follow-up of their services.
	<i>Complex procedures and lack of systematic information on available programs.</i>	Introduction of a simplified “case management” system – for social workers and users – to provide a simpler access to recommended programs/benefits.
	<i>Weak user-oriented redressal.</i>	A strengthened grievance redressal (GRM) by improving internal processes, (with an initial focus on new targeting process), linking to the national GRM system ‘E-People’ and improving the user inter-face in the GRM system (online, phone/voice and smartphone).
Social Security: Pensions and Health Insurance	<i>Cumbersome and paper-based approach to signing up to pension system.</i>	Digital solutions for improved affiliation, registration and declaration in the pension system to facilitate easier user access and improve quality.
	<i>Difficulties and lack of flexibility in paying pension contributions.</i>	Digital pension contribution systems while providing more user-oriented payment modalities (e.g. monthly contributions instead of quarterly).
	<i>Poor systems for monitoring and responding to social security compliance.</i>	Development and operationalization of a machine learning system to automatically monitor social security compliance.
Digital Education Management Platform and Services	<i>System could be improved to become more user-oriented.</i>	Strengthened digital enrollment system to allow for a simpler user interface, to enable better tracking and redress, to allow for better authentication of students and parents, and to enable easier payment.
	<i>Weak education management system that is not fully functional or fit-for-purpose.</i>	Designing and operationalizing a new digital education management platform ²¹ to improve the quality of interaction between parents, students and schools, to strengthen user access to critical service information and services, and to improve accountability. ²²

²¹ This will draw on the the previous existing systems of “myschool” for primary education and “eduserv” for secondary education.

²² Parental and community engagement to strengthen accountability and quality improvement will be integrated in the design of the education management



	<i>Weak mechanisms for detecting, and responding to, students at risk.</i>	Development of a new alert system for students at risk of learning challenges, including dropping out, to better detect and respond to students and risk.
	<i>Cumbersome, costly and long process for enrollment and accessing exam material.</i>	Digitizing the national examination management process to improve student experience, to improve accuracy of information and reduce opportunities for exam fraud.
Digital Learning Management System	<i>Lack of fit-for-purpose digital content for teachers and inspectors.</i>	Pilot and stimulate the development of cutting-edge pedagogical resources for teachers and inspectors to deepen knowledge of teachers and inspectors, help prepare classes, and provide additional materials to enrich teaching.
	<i>Lack of fit-for-purpose digital content for students.</i>	Pilot and stimulate the development of cutting-edge pedagogical resources for students to catch-up on missed classes, to strengthen learning in selected areas, to prepare for exam and class assignments and to reinforce student autonomy.
	<i>Poor use and uptake of new technologies to enhance learning access and experience.</i>	Pilot and stimulate the development of user-friendly interface tools – applications and technologies online, smartphone, kiosk-based – to improve access to, usage of and quality of digital content (such as Virtual Reality or interactive kiosks at school).

27. 1.3. Improving Access and Quality for All: Digitized Access Points promoting digital inclusion (US\$3.2 million).

To complement sub-components 1.1 and 1.2, the operation will further strengthen access to the selected Social Protection and Education services beyond the ten priority services currently delivered through these access points, by improving and expanding physical, digitized access points in the most under-served regions. This will improve access for all citizens in the vicinity but is especially necessary for reaching the target vulnerable groups: low-income groups, women in rural areas, illiterates and the disabled. Such groups often do not have the means to independently access the above-mentioned digital solutions and therefore require extra assistance:

- *Improving and Expanding Digitized Access Points (US\$3.2 million).* This will finance the rehabilitation and expansion of digitized access points (Box 2). These are one-stop-shops for assisting people in accessing existing digital services, and for accepting and transmitting service-related applications. These access points will be digitally connected and equipped for indoor connectivity (see Component 3). These access points will be mainly housed in existing public facilities and postal offices. They take the form of three models that will be deployed selectively depending on local access needs: stationary access point with multiple single-service windows; stationary access point with a single multi-service window; and, mobile access point (such as service buses) with single or multiple service windows. Main activities include: a) rehabilitation of existing digitized access points; b) establishment of new digitized access points in under-served regions; c) provision of ICT and other equipment, including to respond to the needs of vulnerable groups such as enabling disabled access; and, d) training to access point staff so they know how best to provide assistance to the vulnerable groups (Component 2). This financing will enable the roll-out of 69 new digitized access points to provide human-assisted access to the following services (See table below): (a) social assistance applications; (b) social security enrollment and updates; (c) health insurance enrollment; (d) school enrollment; and, (e) Education Management Platform services and assistance. Access to other administrative services, which could be delivered through such access points – namely water and electricity bill payments – will also increase.²³

Box 2: Digitized Access Points

system, but this functionality is expected to be incrementally phased-in to manage political economy issues around parent monitoring of schools. The project will also adapt the use of technologies - audio calls and targeted Whatsapp audio messages - to reach those segments of the population who may not be able to fully user and access online platforms (poor households, illiterates, etc.).

²³ A longer-term objective is to phase out digitized access points when all citizens can independently use digital solutions.



The project will support the deployment of 69 digitized access points - stationary and mobile. These access points will be deployed in determined districts across 19 governorates (further details will be finalized in the operations manual); including:

- 55 stationary access points in districts with very **low access – less than 25% on average - to key administrative service providers** (2019 government survey); of which:
 - 13 stationary access points in the **most lagging governorates (Tunisia Index 2018 for lagging regions)**: Sidi Bouzid, Jendouba, Kairouan, Le Kef, Siliana, Gafsa and Medenine; where they will service around 300,000 citizens
 - 9 stationary access points in the **most lagging districts in terms of performance on educational and schooling indicators** (according to WB PREFAT project)
- Additionally, **14 mobile access points** will be deployed to reach communities in rural and remote areas. The operational manual will indicate specific districts.

Component 2: Public and Private Sector Capabilities for Speedier and Responsive Service Delivery (US\$ 41.4 million, of which US\$20 million disbursed against DLIs)

28. **Component 2 complements component 1 by strengthening public and private sector capabilities for speedier and more responsive service delivery, with a focus on the two target sectors and four flagship programs.** This component addresses the second cause (Section B) by financing enhanced user identification (and data exchange), improved citizen engagement, strengthened capacity and change management, and targeted reform uptake.

29. **2.1. Improving User-Oriented Identification and Interoperability (US\$ 10.6 million).** This addresses poor reliability of user identification system at the sector level and supports systematic links with the national identification system.

- **Social Protection Identification and Authentication (US\$ 4.3 million).** Main activities: (i) the development of a digital social registry – a database of actual and potential beneficiaries – and a social identifier that will accelerate delivery in the sector generally and in the services supported under Component 1;²⁴ and, (ii) strengthened secure data exchange and interoperability (within the MSA, with other service providers and the integration in the National Cloud).
- **Education Identification and Authentication (US\$ 6.3 million).** Main activities: (i) the development of a digitized student register/database, student identifier and sign-on system to contribute to the acceleration of services in the sector and the services under Component 1; and, (iii) strengthened secure data exchange and interoperability (within the MoE, with other service providers) and the integration with the National Cloud).

30. **2.2. Improving Service Performance and Citizen Engagement (US\$1.8 million).** This will set up a central mechanism – housed in the Ministry of Civil Service (MFPMAPP) – called a “Public Service Delivery Barometer” that will ensure citizen engagement and accountability to make the flagship sectors of Social Protection and Education more responsive and better performing. Based on best practice, this will: (a) monitor, through selected indicators, the usage and quality of delivery;²⁵ (b) gather citizen feedback to gauge quality through an annual user survey via a Citizen Report Card (CRC²⁶); (c) publish CRC results to facilitate public debate; and,

²⁴ This will serve multiple social protection programs in enabling improved efficiency, set the foundations for improving existing e-services in the sector and developing new ones, enable quicker, cost effective, and better identification of target beneficiaries, and lead to better management of beneficiaries including monitoring and payment.

²⁵ This will monitor and evaluate performance and quality of digital (user design, maturity, technical specifications, etc.) and physical service delivery (customer relationship, waiting periods, access to information, etc.) channels through performance indicators, periodic user-satisfaction surveys based on life events approach.

²⁶ A citizen report card (CRC) is a simple social accountability tool that can be used to solicit user feedback on service provider performance. During the CRC



(d) initiate improvement initiatives by producing and publishing an action plan (presented in the project's Steering Committee) that shows what provider actions have been taken in response to the survey data. This will require an efficient steering system shared among stakeholders. Surveys will also be disaggregated by the project's target vulnerable groups. The Barometer will be piloted in the first year and scaled progressively.

31. 2.3. *Strengthening Capacity and Change Management (US\$ 9 million)*. This sub-component aims to strengthen the implementation of the GovTech transformation agenda/program and support the implementation of project results with a tailored technical assistance program. The actions and activities proposed in this project will introduce significant changes in how citizens and government interact at different levels in the service delivery chain. In addition, it is expected that public servants will acquire new skills to support this transformation. To this end, the project will fund a pre-identified and on-demand technical assistance program to assist relevant government agencies to achieve the program's objectives, investments and DLIs. This includes:

- the development of the change management strategy and implementation of a sectoral action plan to ease the development, piloting and implementation of planned reforms including adaptation and ownership by all actors concerned with the new e-services developed under Component 1. Learning materials and tutorials for training will be developed and made available online.
- the development and implementation of information, awareness and communication strategies for each sector to ease dissemination for beneficiaries and stakeholders. As noted in Section B, one key barrier to improved service access is a lack of information – on the part of citizens (and especially vulnerable citizens) – about the services they can avail. This will finance targeted information, awareness and dissemination via traditional channels (field campaigns, information brochures, newspapers, radio) and digital tools (websites, SMS, chatbots) to inform targeted citizens of available services, entitlements and service access channels, thus enabling such citizens to better mobilize to access services (IEC). This will finance: a) the development of a user-centered Information Education and Communications (IEC) Strategy; b) technical assistance to implement the IEC strategy; and, c) IEC campaigns through appropriate channels. Communication campaigns and information and training sessions will be carried out to ensure that beneficiaries understand how to use new applications and e-services.
- Collaborative leadership for service providers and institutional communication for better coordination in project implementation including between national and sectoral initiatives (to support components 2 and 3); for example, training, new performance measures, institutionalizing the change generated by the implementation of the reform
- Capacity building for project implementation and execution; providing monitoring tools through third-party audits and ILD verification; and capacity building of the Project Delivery Unit

The project will cover some, but not all, capacity needs, collaborative leadership and change management needs. Whenever possible, funding will be supplemented by additional funds mobilized through grants and other sources of funding to ensure adequate capacity building of the Delivery Unit and sectoral executing agencies.

process, quantitative and perception-based information from statistically representative surveys is gathered, which means that the findings reflect the opinions and perceptions of the citizen group from which input and information is being sought. A CRC can be used to assess a wide range of services, including water and sanitation, solid waste, police and security, street lighting, road and local transportation, health, and education. It is a useful tool for establishing sound baseline information and benchmarking service coverage and performance as well as for identifying inequities in service coverage and quality based on household wealth or geographic locations. <http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/244362-1193949504055/Citizen-Report-Cards-Final.pdf>



32. 2.4. *Incentivizing Key GovTech Reforms (US\$ 20 million, DLI)*. This sub-component complements the planned investments in Components 1, 2 and 3 by incentivizing critical reforms to achieve the project objectives (see DLIs annex for further details). Certain key reforms are already being prepared, such as the new Personal Data Protection Law, and will complement, but not be the focus of this operation. Ongoing parallel TA provided by the Bank and other donors will provide additional implementation support for the achievement of these DLIs.²⁷

- **DLI 1: Adopting Key Govtech and Digital Economy Regulatory Reforms (US\$6 million)**. This DLI will incentive the adoption of a new regulatory framework to accelerate the adoption of simple, user-centric digital services (supporting Component 1), to strengthen interoperability (supporting Component 2), and to improve the connectivity sector (supporting Component 3). Specifically, it will incentivize four mutually-reinforcing aspects: (i) the adoption of an interoperability framework; (ii) the implementation of administrative simplification of the flagship services; (iii) the establishment of the Digital Agency; and, (iv) the adoption of the Digital Law. First, the interoperability framework will enable data-sharing across sectors to enable improved user-identification and speedier service delivery. Second, it will incentive the implementation of key measures to simplify and digitize the operation’s 4 flagship services. This is critical given that extra incentives are needed to address possible resistance to implementation of these measures. Third, the establishment of the Digital Agency will strengthen the coordination and implementation of the GovTech agenda, which is a critical need in the Tunisian context. Fourth, the Digital Law²⁸ would replace the existing telecommunications law to provide a modern, private sector-oriented regulatory framework based on global developments in technology and telecommunication. The Digital Law will help sustain and consolidate the activities under Components 1, 2 and 3, notably: (i) by strengthening data exchange, user identification and data protection – key ingredients of user-centric e-services – and; (ii) by ensuring a more open and competitive telecoms and connectivity sector for more sustainable and efficient connectivity in the country, and by ensuring a strong coordination of connectivity investments in the country to avoid duplication and to ensure mutualisation (see Component 3). The project does not finance the interoperability framework, the Digital Agency or the Digital Law. The project does finance the *studies* on administrative simplification: the DLI incentivizes the *adoption* and *implementation* of the study recommendations.
- **DLI 2: Delivery Responsiveness and Access for Under-Served Groups (US\$6 million)**. This DLI particularly complements the activities under Component 2 and incentivizes selected legal reforms to strengthen accountability in service delivery and to strengthen the enabling environment and sustainability for Digitized Access Points to address the digital divide. First, it will incentivize the adoption of the National Open Data decree and incentivize the MSA and MoE to publish service delivery information according to Open Data requirements. This will increase service delivery accountability and will stimulate private sector activity such as data analytics enterprises. Second, it will incentivize the adoption and implementation of

²⁷ The Bank in Tunisia has three major grant-financed TA programs to support these 3 DLIs: (a) the support to the MTCEN through the MENA Transition Fund; (b) the support to the modernization and digitization of the public administration (funded by the Tunisia Multi-Donor Trust Fund, Moussanada); and, (c) the support to the Open Government Partnership, which has a significant program of support on Open Data (funded by the Tunisia Multi-Donor Trust Fund, Moussanada).

²⁸ The law provides for the different provisions to be subsequently formalized in implementing arrangements, including (i) clarifying and specifying the roles of different agencies and authorities in the digital ecosystem, including new agencies such as the digital development agency (ii) promotes interoperability and encourages the administration to simplify procedures by no longer requesting information more than once (once-only principle) (iii) describes the mechanisms for strengthening digital trust services (digital certificates and e-signatures) and protecting digital identity and (iv) strengthens the protection of the personal data of citizens / companies.



a decree to ensure the sustainable functioning and expansion of digitized access points. Functioning digitized access points will improve access for all, and especially for vulnerable groups. The decree is critical to ensure: (i) integration and coordination between the sectors and services provided through the access points; and, (ii) adequate financial and human resources alongside a sustainable business model for the access points. In addition to incentivizing the adoption of the decree, the DLI will incentivize its implementation by ensuring that the new access points are “operational”: this means that the GoT needs to provide adequate financing and human resources to ensure that the access points are fully functioning.

- **DLI 3: Optimizing Connectivity (US\$ 8 million).** This complements the activities under Component 3 by incentivizing the adoption of an approach to connectivity that is coherent with the national connectivity strategy, is optimal and rooted in an MFD approach, and is sustainable. First, it will incentivize a coherent approach to connectivity by incentivizing the high-level adoption and publication of the Updated National High-Speed Broadband Strategy, which has not been updated since 2014. Relatedly, it will incentivize the adoption of an Updated Connectivity Strategy for Schools²⁹ that provides a deeper diagnostic of school connectivity needs in order to develop an optimal, MFD approach. Further, it will introduce specific procedures including requirements and specifications through a standardized contracting approach for all offices of the public administration, with the view of federating government offices connectivity and services. Second, to address the digital divide, it will incentivize the extension of network coverage to all schools in white areas financed through resources mobilized by the government from the State budget, including resources from the ICT Development Fund. Third, it will enable greater sustainability by incentivizing the mobilization of additional public and/or private resources to invest in school connectivity.

Component 3: Reinforcing Connectivity in Education and Social Protection for more Equitable Access to and Quality of Services (US\$42.3 million)

33. **This component seeks to accelerate implementation of the solutions provided under Components 1 and 2 by stimulating targeted, efficient and private-sector-driven investments to address current inequitable access to and weak quality of indoor and outdoor connectivity at the level of frontline service providers, especially in the lagging areas.** Better connectivity will contribute to improving equitable access, quality and accountability of the selected services by *enabling* the uptake of digital delivery solutions combined with change management (Components 1 and 2). A summary describing the intervention logic for indoor and outdoor connectivity is detailed in paragraphs 35-36 and in Table 5).
34. **As noted in Component 1, the project will not invest in equipment in schools (such as tablets or computers) or SP offices for the end-users; this will be provided through other sources, including through the national budget (e.g. subsidies to incentivize responsible use) as well as the Education Project financed by the World Bank (PREFAT).** Direct subsidies to end-user equipment will ensure that internet-based services are accessible to all end-users, especially students unable to purchase any connected device. The MoE is currently experimenting the best way to facilitate student access to the internet (Bring Your Own Device schemes, Fondation Orange Grant Program³⁰, etc.). The Ministry is expected to formalize a plan before the end of 2019 to select the best way to provide devices in schools. The operation will support certain devices for social

²⁹ This Strategy will include a detailed action plan on connectivity and digital needs of schools. This will cover the following aspects: detailed feasibility study and dynamic map of school connectivity status, needs assessment, define Service Level Agreements (SLA) standards (including bandwidth provision per student or per site, opportunities to use schools as points of presence and monitoring and payment conditions), technical specifications and procurement documentation, multi-phased investment action plan (prioritization, lots, regions, appropriate connectivity solution).

³⁰ <http://www.cnte.tn/index.php/partenaire/education-numerique-avec-orange>



workers through a small “service contract”, and the MSA also has a strategy for financing and investing in devices, as described in Component 1.

35. The connectivity intervention logic for the social protection offices covers only 250 offices which have indoor connectivity needs. The regional and local institutions of the Directorate General for Social Protection are interconnected via RNIA2. This project was funded from the National Budget. To improve the quality of the service, the MSA would require service providers to move to another level of service given that this is a “turnkey” service contract. The operation, as such, will finance the remaining 250 SP offices that require upgrading of their indoor connectivity.

36. The intervention logic for school connectivity is based on a detailed assessment of outdoor connectivity according to three geographical areas - alpha, beta and gamma – as indoor connectivity should not be deployed in absence of appropriate outdoor connectivity (broadband access) to allow successful implementation of service delivery solutions by front line service providers (Table 5). This approach mitigates risks (e.g. limited capacity in design and managing this type of procurement package; risks of market distortions with provision of unsustainable outdoor connectivity) through careful sequencing, piloting, testing and scaling up.

- When appropriate outdoor connectivity is available (Alpha / urban areas), indoor connectivity investments financed by the project can be immediately deployed using managed contracts. Indoor connectivity includes in-site connectivity (LAN improvement or WIFI depending on feasibility and need to extend the connectivity to the different internal areas of these facilities), network equipment, bandwidth (adjusted to use cases i.e. online school and exam registration, student record, digital content), IT services, firewalls for security and caching devices of select content (e.g. stimulate local content) to ensure optimal availability and performance of the connectivity.
- When appropriate outdoor connectivity is not available, there is a need for a careful sequencing of project interventions according to the nature of the area (Beta / peri-urban or Gamma / rural-remote) to maximize service delivery impact, optimize investments and crowd-in the maximum of complementary investment. The project will not fund government-owned broadband networks, as there is a competitive telecom market in Tunisia with four licensed operators that have rights to serve public and private clients (four operators, of which one is exclusively wholesale). An MFD approach³¹ will be operationalized under the project to incentive and catalyze private sector involvement through subsidies and regulatory incentives, building upon the update of the National Broadband Plan (Ultra-Fast Broadband Strategy 2014) funded by MENA Transition Fund. This updated National Broadband Plan will assess the current broadband penetration and speed by governorate and provide policy options that, on one hand, accelerate Ultra-Fast Broadband (UFB)³² deployment in appropriate geographical locations and, on the other, strengthen the involvement of the private sector and the level of competition in the sector for broadband.

³¹ The MFD 4-tiered approach:

- Market can respond and proper (enabling legal and regulatory) environment is in place: 100% investment is private.
- Need to strengthen the enabling environment: either by removing barriers or obstacles (e.g. regulatory, competition) or by adding possibilities (e.g. licensing, spectrum, auctions) to stimulate private sector investment (that will do core connectivity).
- Partial market failure.

Total market failure: IDA or Public funding (such as a Universal Service Fund) will be used to compensate.

³² The Government of Tunisia, and specifically MTCDE, and the Instance Nationale des Telecommunications (INT), is updating its National Broadband Plan (Ultra-Fast Broadband Strategy 2014) through a grant from the MENA Transition Fund. The proposed strategy will develop the main technology, regulatory and financial elements needed for the Government of Tunisia to update its UFB policy that will foster private sector participation to accelerate the roll-out of UFB.



- For Beta areas and most Gamma areas, private sector could be crowded-in through a wholesale, open access model. During the first 18 months, the expansion of broadband fiber or Fixed Wireless Access (FWA) coverage by private sector under a wholesale, open access approach will be tested in one city (beta area, peri-urban close to an alpha area, urban with good outdoor connectivity via fiber). The approach could be a consortium dealing with both outdoor connectivity (requirement: high-speed broadband access via Fiber or FWA through Wholesale, Open Access approach) and indoor connectivity (with internet service providers and IT companies). This approach will ensure the infrastructure supported by the operation will be mutualized and will not duplicate other investments; it would be subsequently scaled up, based on lessons learned.
- For the remaining Gamma areas that that will not be covered by private sector in absence of government intervention (white zones), it is possible to use public resources, including resources from the ITC Development Fund to address additional connectivity needs. There is an ongoing project that aims to bring network coverage to white areas which is financed through the ICT Development Fund.

Table 5: Project Approach and Sequencing to Connecting Schools in Tunisia

Zone	Current school coverage	Number of schools ³³	Project “Outdoor” Connectivity Intervention	Project “Indoor” Connectivity Intervention	Timeline
ALPHA (urban)	Fiber (mostly)	700	None (already covered)	Managed contracts	First 18 months
BETA (peri-urban)	ADSL	2,307	At least [2,000] schools with high speed broadband access (fiber and FWA) through a Wholesale Network Model (open access) to be complemented by GOT funds)	Managed contracts	Y2 onwards
GAMMA (rural remote)	3G/4G	2,593		Managed contracts	Y2 onwards
	3G/4G	[* 3G/4G in β and γ]		Managed contracts	Y2 onwards
	Not covered	57 ³⁴	Use the FDT to provide access to schools in white areas (DLI)	Managed contracts	Coverage: first 18 months Connectivity: Y2 onwards

37. The Project will also use result-based financing under component 2 (DLIs 1 and 3) to incentivize the adoption of a new regulatory framework for a more open and competitive broadband connectivity sector and to incentivize an optimal approach to sustainable connectivity, including through a coherent national and sector-level approach, investment optimization and leveraging additional sources of financing. The disbursement-linked results are: (i) the adoption of the National Broadband Plan, including the Digital

³³ Numbers will be reverified by effectiveness in light of the ongoing education connectivity study.

³⁴ Number to be reverified before effectiveness.



Infrastructure Plan, including detailed action plan on connectivity and digital needs of schools³⁵; and, (ii) mobilization of additional public resources including the use of ICT Development Fund resources to expand broadband network coverage and quality, currently in white areas/limited coverage, with 4G technology, or appropriate broadband technology (including FWA and Broadband via Satellite) and to meet connectivity and digital needs of schools, including but not limited to schools in white areas.

38. Given that the total cost of upgrading connectivity for all the schools in need of better connectivity exceed the loan envelope, the following criteria will be applied to select schools to be covered under this operation:

(1) *Equitable access*: to ensure coverage of schools in white areas (address digital divide), in lagging regions (IDR 2018) where broadband access/quality are most challenging, and in areas where the private sector is less likely to reach; (2) *Educational quality and impact*: the project will follow a similar approach to PREFAT (PAD2680) to identify low performing schools with unmet connectivity and digital needs; and, (3) *Best technically feasible broadband option*: Ease of connectivity, change management considerations, and other technical criteria such as type of institution, number of users, geographical characteristics, distance to telecommunication networks, and building conditions. Cutting-edge technologies to consider for integration into project implementation might include Broadband by satellite, “TV white spaces” and FWA, the use of “passive wi-fi” and mobile connectivity solutions³⁶.

39. Sub-component 3.1: Indoor Connectivity to Deploy the New Service Delivery Solutions in areas with Sufficient Outdoor Connectivity (US\$ 9.7 million). This will work with frontline providers with good degree of outdoor connectivity to quickly test and roll-out the service delivery solutions under Component 1 and 2. Specifically:

- The project will provide indoor connectivity³⁷ through one (or more) single responsibility end-to-end service contracts to connect and deploy the new institutional and digital solutions in 1,005 frontline service providers (700 schools, 250 SP offices and 55 digitized access points) in the first 18 months. These are entirely open and competitive processes, including multiple lot IT Supply and Installation procurement packages (“turnkey” contracts), with specific, set standards and specifications, to ensure quality, consistency of service and scale, and the involvement of competent, experienced general contractors, involving, if possible, young technologists at the local level.
- The project will strengthen capacity and training personnel of line ministries, particularly the MoE, to monitor contractual obligations in terms of SLA and quality of service (QoS) of private sector operators and develop a sustainable business model for connectivity to mitigate the risks.
- The project will provide Technical Assistance: i) to support sustainable business models³⁸ (e.g. Portugal³⁹, Uruguay, Chile, North Macedonia, Brazil, Intesa Sao Paulo, among others) that have proven successful (e.g. community WIFI hot-spot enabling basic internet access and local content, student plans, maintaining equipment in exchange for benefitting from free internet access); and, ii) to explore other

³⁵ This may include requirements and specifications to introduce standardized contracting approach for all public administration offices, with the view of federating government offices connectivity and services into a single, centrally managed network, provided by private sector operators but managed centrally by the CNI through a single Network Operating Centre (NOC).

³⁶ Passive wi-fi is a new technology to reduce power drain in Wi-Fi equipment. Mobile Wi-Fi technologies are growing internationally.

³⁷ Indoor connectivity includes in-site connectivity (LAN improvement or WIFI depending on feasibility and need to extend the connectivity to the different internal areas of these facilities), network equipment, bandwidth (adjusted to use cases i.e. online school and exam registration, student record, digital content), IT services, firewalls for security and caching devices of select content (e.g. stimulate local content) to ensure optimal availability and performance of the connectivity.

³⁸ For example, in Portugal, mobile providers offered plans for students; in Zimbabwe access to many educational web sites doesn't count against mobile data plans; in Uruguay they provided free broadband WIFI in village squares radiating outward to help students connect after school hours. These models have proven successful (e.g. Portugal, Uruguay, Chile, North Macedonia, Brazil, Italy's Intesa San Paolo, Avanti, among others) having the school. The system is sustainable and paid for with people connecting to the hot spot and paying their bundles

³⁹ <https://blogs.worldbank.org/edutech/portugal-2>.



regulatory tools, including special conditions in licensing (e.g. wholesale operator), supply-side or demand-side subsidies, infrastructure sharing regulation, leveraging the fiber assets of utilities.

40. *Sub-component 3.2: Indoor and Outdoor Connectivity to Deploy the New Delivery Solutions in areas with Insufficient Outdoor Connectivity (US\$ 32.6 million).* This will work with the frontline service providers in the lagging regions of the country that have the greatest connectivity needs. This will involve investments in outdoor and indoor connectivity to connect and deploy the new institutional and digital solutions with high-speed broadband access, in lagging areas for at least 2,000 schools

- A cross-cutting technical assistance will be deployed under this component to support all connectivity planning, design and investments. It will include a detailed action plan on connectivity and digital needs of schools, to identify optimal technological, financial and procurement choices and will cover the following aspects: detailed dynamic map of school connectivity status, needs assessment, SLA standards (including bandwidth provision per student or per site, opportunities to use schools as points of presence and monitoring and payment conditions), technical specifications and procurement documentation, multi-phased investment action plan (prioritization, lots, regions, appropriate connectivity solution). This will include strengthening the CNI through a single Network Operating Centre.
- In the first phase of the project (18 months), the project will implement a single responsibility end-to-end service contract through a 2-stage RFP process⁴⁰ to test and pilot the expansion of broadband fiber or FWA coverage by private sector in one city (beta area, peri-urban close to an alpha area, urban with good outdoor connectivity via fiber). The approach could be a consortium dealing with both outdoor connectivity (requirement: high-speed broadband access via Fiber or FWA through Wholesale, Open Access approach) and indoor connectivity (with internet service providers and IT companies).
- For the second phase (year two onwards), before scaling up, the approach will be adjusted with different lots, different levels of school connectivity readiness, based on lessons learned, market response as well as geography. It will then be scaled up to the other schools on that basis; it will be complemented by additional public resources as needed given the typology of the area, beta or gamma (DLI).
- For schools in non-connected, “white” areas, the component will leverage additional public resources, including ICT Development Fund resources to bring them all under coverage during the first 18 months of the project (the result is reflected in the DLI 3.2); the component can then finance a single responsibility end-to-end service contract to provide indoor connectivity to those schools from year two onwards.

41. **Table 6 outlines a proposed approach for implementing each connectivity solution; this approach will be refined and re-validated in the first phase of implementation.** The component proposes to introduce the same procurement approach as the one used for the contracts for the inter-administrative network for municipalities, RNIA 3, funded by the African Development Bank. The RNIA3 model involved purchasing of connectivity from private operators including through consortia which included private wholesale and retail broadband operators as well as local IT companies and Internet Service Providers (ISP). The project will improve upon this model by including the following requirements and points: entirely open and competitive process, including multiple lot IT Supply and Installation procurement packages (turnkey contracts), with specific, set standards and specifications, to ensure quality, consistency of service and scale; and, wholesale,

⁴⁰ Given the nature and complexity of the connectivity and broadband service contracts, it is recommended that the Delivery Unit, the project’s PIU, launch a Request for Proposals (RFP) to ensure the government’s business needs are better met. The RFP is normally conducted in a two-stage process to allow bidders to first offer customized solutions or proposals that may vary in the way they meet or exceed the service and performance requirements of the RFP document. The process also allows for an evaluation of the degree to which a bidder’s proposal meet the requirements using scoring criteria and an evaluation methodology.



open access approach (requirement to cover both the school and selected access points in the vicinity of the school, to increase fiber density; obligation to include spare capacity and a second pair of dark fiber; infrastructure sharing and open access provisions). Key considerations for determining of the procurement approach are provided in more details in the Procurement Plan and in the appended PPSD; and will be further refined as part of the detailed action plan on connectivity and digital needs of schools. Below is the proposed approach for component 3, which could be refined following the feasibility study while considering the main principles mentioned above.

Table 6: Proposed Division of IBRD Financing

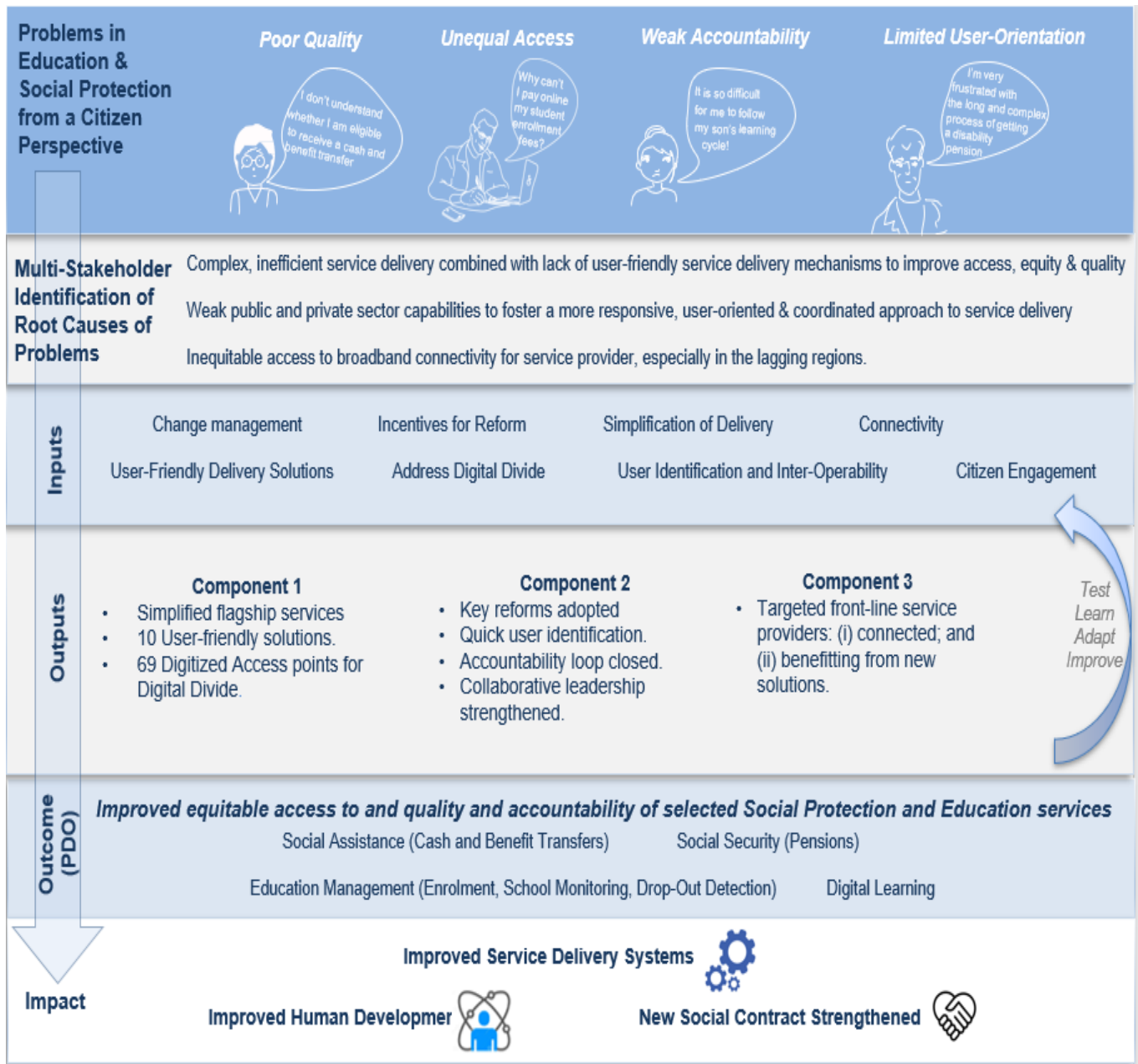
Activity	Estimated Cost (US\$)	Estimated contract completion date
Single responsibility end-to-end service contract(s) in Alpha areas: Improved indoor connectivity for 1,005 (700 schools, 250 SP offices and 55 digitized access points) in these areas	9,300,000	T0+18 month
Phase 1: Single responsibility end-to-end service contract: Test and pilot the expansion of broadband (fiber or FWA) coverage by private sector under a wholesale, open access approach in one city in beta area in combination with indoor connectivity through a two-stage RFP process	1,300,000	T0+18 month
Phase 2: Single responsibility end-to-end service contract(s) in Beta and Gamma areas: Adapt and scale-up approach to meet connectivity (outdoor and indoor) needs of other schools in beta and gamma areas [at least 2000], provided for white areas that the FDT has been effectively mobilized	29,700,000	Project Lifetime
Procurement of TA and other services: i) capacity building and training; and ii) develop sustainable business models	2,000,000	T0+ 24 month

C. Theory of Change

42. The Theory of Change identifies the problem from a user perspective, identifies the causes of this problem in the service delivery chain and then applies GovTech solutions to the causes to bring about tangible impacts on equitable access to, and the, quality and accountability of, the selected sectors. Evidence shows that starting from the needs of users can help improve the service, citizen trust and the social contract. The Theory of Change (ToC) uses a “life events” approach combined with a “collaborative leadership” approach (see Box 4), which has four main steps (Figure 2 and Box 4). First, it focuses on the service user and identifies the needs of, and problems faced by, the user in their journey to access the flagship services. Second, it uses a multi-stakeholder collaborative leadership approach in order to: (i) unpack the root causes in the service delivery chain that underpin the problems; and, (ii) build a multi-stakeholder consensus around the causes and solutions. Third, to address the identified causes it proposes appropriate and context-specific solutions. These solutions combine the introduction of new incentives and change management with user-friendly institutional and digital solutions. Fourth, it takes an iterative and adaptive approach, which tests solutions, learns from this testing, adjusts the solution and then scales up.



Figure 2: The Operation's Theory of Change



Box 4: Life Events and Collaborative Leadership Approaches

A life events approach is a new approach to public service delivery reform that puts the user at the center of the reform process and seeks to make public administration reforms more user-centric. “Life events” map the user journey to access a given service and focuses on the different points at which the user interacts with the service provider. It identifies the needs and problems from the user perspective, and then seeks to find solutions to the identified bottlenecks in the service delivery chain. The user is then consulted periodically during implementation to ensure their feedback is taken on board and adjustments are made accordingly.



The Collaborative Leadership for Development program at the World Bank attempts to approach development by explicitly addressing the ‘adaptive’ and people-related challenges, in addition to the technical aspects of reforms. It recognizes that change is not linear and that all stakeholders need to be on board to move the process forward. There are several tools that have been tried and tested in this field. The effort is towards building a reform coalition. It helps relevant actors to come together to align around a shared understanding of the development problem, and to facilitate a joint vision and joint development of potential solutions. The focus is on helping stakeholders collectively learn to look at things differently so that they can act differently for different results. There is coaching support provided during implementation, with an emphasis on iterative adaptation and learning by doing.

D. Rationale for Bank Involvement and Role of Partners

43. **The Bank is involved in this domain, at the request of the GoT, in order to bring its financial and technical comparative advantage and to address important needs in the expanded roll-out of the GoT e-government and GovTech approach.** The Bank has extensive international experience in supporting the e-government/GovTech agenda. This experience has informed the design of the operation and will inform the implementation support to this operation. The GoT has also identified important needs and lessons in the Tunisian context to deepen and strengthen the implementation of the GovTech agenda (see Section E below).
44. **The project also builds on a WBG program in Tunisia that supports the modernization and digitization of the public administration, the reform of the social protection sector, the improvement of the education sector and the establishment of a more inclusive social contract.** First, the operational design is informed by a strong program of analytical, diagnostic and policy-related work funded by the WBG and other actors (see Section E below). Second, the project builds on, consolidates and complements an ongoing program of World Bank Technical Assistance and lending, which includes: (i) the DPF 2018 (for example, by operationalizing the social assistance reform program); (ii) the TA program on social protection (PARPS) (for example, by operationalizing a new targeting approach); (iii) the TA program on Public Administration Reform and Open Government (for example, by operationalizing administrative simplification, or Open Data); (iv) the current lending operation in the Education sector (for example, by further strengthening education delivery systems); and, (v) the pipeline lending on startups (by strengthening public sector innovation and private sector involvement).
45. **The operation will complement the ongoing work of development partners and will ensure close coordination with ongoing and planned investments in this field.** A mapping of donor interventions was undertaken in the preparation of this operation. A key ongoing investment is by the African Development Bank (AfDB), which is supporting a range of national-level e-government initiatives, such as the Unique National ID or the National Interoperability platform. Other partners have investments in this field. This operation builds on and complements these investments, as outlined in Section E below.

E. Lessons Learned and Reflected in the Project Design

46. **The operation integrates key lessons from implementing e-government reforms in Tunisia.** Key lessons include: (1) there is a need to consolidate GovTech investments and to mitigate the risk of duplication; (2) there is a need to ensure a strong focus on GovTech at the sectoral level, and to ensure close coordination between greater linkages need to be made between national initiatives – such as the National ID system or Interoperability platform – and sectoral initiatives; (3) there is a need to put the user at the center and ensure a tangible impact on the lives of users, rather than focusing uniquely on back-end reforms or ICT systems; and,



(4) a critical factor for success is strong change management and coordination. The design is also informed by a multi-year program of operational, analytical, diagnostic and technical assistance work in Tunisia, as outlined in Section D. This ensures the relevance of operational design to the Tunisian context, as well as enabling the operation to identify the most strategic opportunities for supporting this agenda.

47. The private sector can play an important role in spurring advancement and innovation in this field.

Experience to date underlines the importance of the following measures: (i) incentivizing a GovTech policy environment that promotes a modern, private-sector oriented approach; (iv) incentivizing private sector participation and innovation by bringing in private sector expertise to support digital solution development and by creating open data platforms for private sector analytics enterprises; (v) stimulating private-sector connectivity investments; (vi) procuring solutions on an infrastructure and software as a service basis; and, (vii) placing emphasis on fit-for-purpose and value-for-money technologies.

48. The operational design integrates some of the latest international lessons and innovations in his domain (Figure 3), while seeking to adapt to the Tunisian context. Key lessons include:

- *The users, and frontline service impacts, need to be at the center of the reform process.* This was ensured through a mainstreaming of a “life events” approach as outlined in the Theory of Change section.
- *Technological solutions need to be combined with a strong focus on institutional reform, incentives and change management.* Technology brings opportunity, paving the way to create new jobs, increase productivity, and improve public services.⁴¹ Yet it is rarely sufficient as outlined in WDR 2016 on “Digital Dividends”. It should be coupled with addressing institutional coordination failures and bottlenecks, linking technological innovations with public administration reforms and pro-actively involving relevant stakeholders (WDR, 2017).
- *The “right” and lowest cost technologies should be used to solve the identified service delivery problems.* The operation will also explore the integration of some of the latest technologies to enable leapfrogging. For example: (a) Component 1 will test the following technologies: using artificial intelligence to improve the social protection targeting system; using Big Data and machine learning to improve social security compliance and fraud detection; using algorithms to improve detection of children at risk of drop-out; using gaming, virtual reality and interactive learning kiosks to improve and tailor learning; (b) Component 2 will focus on the transition to a Cloud-based system and explore how related innovations, such as Blockchain, could be leveraged for ID and payment systems; and, (c) Component 3 will support new integrated business models for leveraging private sector investments in connectivity in the needier schools and regions (as looking at the possibility of adopting new innovations in connectivity such as 5G, passive wi-fi and mobile connectivity).
- *CivicTech tools – to deepen citizen engagement – should be used to close the “accountability loop”.* This means ensuring that citizen feedback and participation on service delivery leads to improved government responsiveness through mechanisms to ensure supply- (government) and demand- (societal) side pressures are maximized.
- *Dedicated measures are needed to address the Digital Divide.* International experience shows how important it is to reduce access barriers related to the “digital divide”. Mechanisms for reaching lagging

⁴¹ This project leverages technologies to increase and simplify citizen services, increase fiscal efficiency, improve institutional effectiveness and targeting (social protection), and catalyse economic growth. Key transformative technology components of the project are as follows: (a) using innovative technology (e.g. SMS, open data platforms) to improve citizen experience, transparency, accountability, and reduce administrative discretion; (b) simplifying procedures and digitalizing services to reduce complexity and cumbersome of procedures; (c) strengthening connectivity and interoperability to break down administrative silos and ensure a “once only” service access for business and systems; and, (d) ICT for fiscal efficiency and savings (public investments, procurement).



regions and vulnerable groups are built into the design (see Annex on Digital Divide).

Figure 3: Lessons in Digital Government (source: World Bank, 2018).



49. **Administrative ownership and incentives for reform uptake are critical.** Resistance to reform or inertia in the civil service can hinder the adoption of new institutional and digital solutions for user-centric public services. On the other hand, GovTech reforms can also have positive impacts on the work and job satisfaction of civil servants. The preparation and design seeks to address these challenges through the following measures: (a) using a participatory approach to design the problems and solutions so as to build a consensus on the way forward; (b) selecting project activities where there is a vision and reform champion, including building on solid technical assistance work; (c) addressing targeted incentives through selective DLIs; (d) building in a sub-component on change management and collaborative leadership; and, (e) creating internal and external pressures for accountability and incentives for change, notably through increased transparency, improved monitoring and citizen engagement.
50. **Risks associated with stranded assets, obsolete technologies, and ICT procurement need to be identified and addressed up-front and diligently reviewed throughout implementation.** This has been done in project preparation and has been built into program implementation design, as outlined in the Risk section.
51. **The operation focused on *selected* sectors and flagship programs to ensure impact but will also create the foundations for quickly adding new services and scaling the approach in other sectors.** International experiences demonstrate the need to avoid too broad an approach, as it tends to spread out resources, concentrate interests opposed to reforms and produce fewer results.
52. **Linear results are rarely achievable or desirable, hence an adaptive approach needs to be taken.** This involves testing, adapting and scaling, as reflected in the ToC.
53. **Technical assistance and capacity building support needs to be delivered in a nimble and tailored manner.** A lesson learned from similar operations is the need to have clearly-defined implementation arrangements, and to provide technical assistance efficiently and early on, especially in procurement and public financial management. It is also important to build on existing institutional implementation arrangements, such as the Delivery Unit at the MTCEN.



III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

54. **The institutional arrangements have been discussed extensively with the Tunisian authorities and are based on the principles of transparent governance and agility, alongside well-defined roles and responsibilities and accountability mechanisms.** The implementation arrangements described below were agreed in order to: (i) address key implementation capacity and coordination risks, and therefore ensure effective implementation of an inter-ministerial project; (ii) ensure clear, transparent and well-defined roles and responsibilities for each ministry; (iii) to ensure a balance of technical (ICT) civil servants and service delivery civil servants throughout implementation; (iv) adequate change management support is provided; and, (v) leverage and involve service contracts and private experts and organizations to support implementation (see Components 1, 2 and 3). The arrangements will be further detailed in the Operational Manual. Additionally, the project has identified risk mitigation measures related to implementation and integrated a sub-component on change management. These aspects are outlined in the Component description and Risk section.
55. **The Steering Committee's role is to steer the project strategically and to ensure minister-level support.** The committee will work based on the reports submitted by the PMU. It will be composed of the representatives of the four selected ministries, the MDICI and MoF and will be chaired by the MTCEN.
56. **The PMU will centralize information, strengthen inter-ministerial coordination, and implement a clearly-defined governance structure.** The PMU will be housed at the level of the MTCEN, as the MTCEN has been granted the mandate and authority to lead the supervision of all government digitization projects at the strategic planning, design, and implementation stages (Cabinet Decision of 27/03/2018). This PMU will benefit from being housed in an existing, functioning structure called the Delivery Unit (DU). The DU could later be housed in the new Agency for Digital Development (AND) upon its creation. The PMU will be inter-sectoral by including a designated focal point from the other three implementing ministries as well as holding regular coordination meetings with the Ministerial Level teams (see below). A dedicated team will be appointed within the DU to implement the operation, including but not limited to a Project Director (civil servant), Project Coordinator(s), an FM specialist, a Procurement Specialist, an M&E specialist, an Environmental and Social (E&S) Risk Management Focal Point and other relevant experts from the private sector. It will focus on project management and handling financial management and procurement. The PMU will coordinate project activities, ensure the rapid and efficient implementation of each activity, and manage administrative and fiduciary aspects. It will also be responsible for project evaluation, monitoring and reporting, including the submission of projects reports. The PMU will advise and assist the Sectoral Project Teams, including validating calls for tenders. The PMU will meet daily. The PMU will be reinforced, where relevant, by external experts.
57. **Three small Project Management Teams at the three implementing ministries will also be established to ensure the day-to-day oversight and implementation of their respective activities, and to ensure all the technical details for procurement and implementation are provided to the PMU.** These will be small teams will be designated by the respective ministers and led by a Director General. The teams will be composed of officials in charge of service delivery and ICT functions as well as fiduciary and procurement experts. They will be assigned to the technical design of procurement contracts and the day-to-day execution of their assigned



project activities. In addition to day-to-day oversight of implementation, the Teams will provide technical content for the procurement documents, with support, validation and processing from the PMU. Additional staffing may be provided, where necessary, to strengthen these Teams.

58. **To ensure effective implementation, clear roles and responsibilities have been agreed in terms of components, sub-components and DLIs.** See Table 7 and Figure 4.

Table 7: Agreed GoT Implementation Roles and Responsibilities

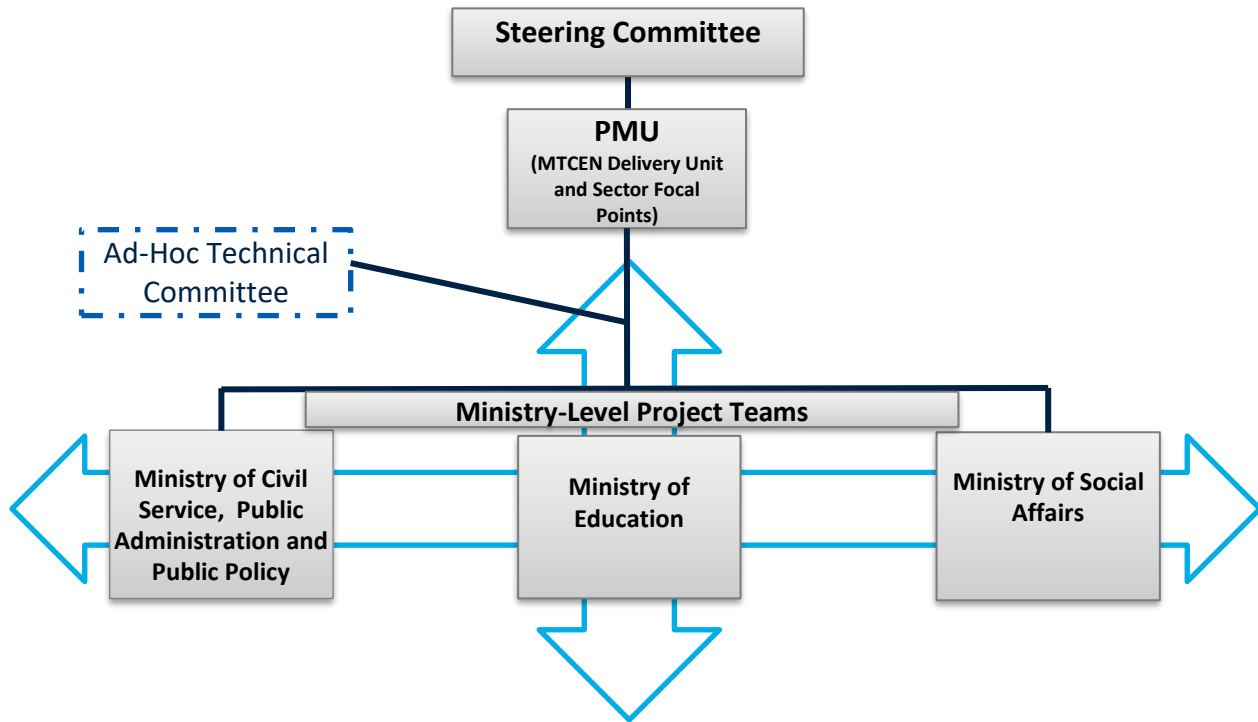
Component	Sub-Component	Lead Agency
1. User-Friendly Institutional and Digital Delivery Solutions	1.1. Improving Social Protection Delivery Efficiency, Accountability and User-friendliness	MSA
	1.2. Improving Education Service Delivery Efficiency, Accountability and User-friendliness	MoE
	1.3. Improving Access and Quality for All: Digitized Access Points promoting digital inclusion	MFP
2. Public and Private Sector Capabilities for Speedier and Responsive Service Delivery	2.1. Improving User-Oriented Identification and Interoperability.	MSA (social identifier) MoE (education identifier)
	2.2. Improving Service Performance and Citizen Engagement	MCSPAPP (with MoE and MSA)
	2.3. Strengthening Capacity and Change Management	MTCEN (with MoE and MSA)
	2.4. Incentivizing Key Reforms (DLIs) <i>DLI 1: Adopting Key GovTech and Digital Economy Regulatory Reforms</i>	MDICI MTCEN (with MoE/MSA)
	<i>DLI 2: Delivery Responsiveness and Access for Under-Served Groups</i> <i>DLI 3: Optimizing Connectivity</i>	MFP (with MoE/MSA) MoE (with MTCEN)
3. Reinforcing Connectivity in Education and Social Protection for more Equitable Access to and Quality of Services	3.1. Indoor Connectivity to Deploy the New Service Delivery Solutions in areas with Sufficient Outdoor Connectivity	MoE and MSA (with MTCEN)
	3.2. Indoor and Outdoor Connectivity to Deploy the New Delivery Solutions in areas with Insufficient Outdoor Connectivity	MoE (with MTCEN)

59. **An agile and Ad-hoc inter-ministerial Technical Committee will also meet as needed to ensure strengthened coordination across ministries, between national and sectoral projects and to design the technical specifications of key contracts.** A Technical Committee meeting can be called by the Minister and/or PMU and/or Sectoral Teams. Key roles include: reviewing and validating the Terms of Reference of key investments, such as on connectivity, the cloud system and the identification system; and, meeting to resolve bottlenecks in project implementation.

60. **The PMU, and implementing teams, will also coordinate closely with development partners to ensure complementary and synergy with ongoing and new investments in the sector.** Coordination on policy dialogue, technical assistance, and other infrastructure investments, planned and on-going, are critical factors for the successful implementation of the project.



Figure 4: Project Implementation Arrangements



B. Results Monitoring and Evaluation Arrangements

61. **The project supports the PMU, housed in the MTCEN, in setting up a strong monitoring and evaluation system.** This is financed under Component 2. The PMU will be responsible for project monitoring and evaluation activities (M&E), drawing data from the relevant Ministries. The results framework in the Annex summarizes the verification protocols. The M&E system – which will be further detailed in the Operational Manual – will incorporate mechanisms to monitor project implementation, compliance with the established procurement and financial management procedures, and achievement of project performance indicators. Monitoring instruments include bi-annual progress reports on project implementation, and output and performance indicators. Data will also be drawn from the Barometer, which will also be disaggregated by target vulnerable groups.
62. **As an important element of the monitoring and evaluation, the project will collect and disaggregate data by gender in the key areas of access and satisfaction/voice.** Based on the analysis of gender disparities undertaken during project preparation, an increase of 25 percent in terms of female access to digital services is targeted. In terms of beneficiary satisfaction with services, the project expects to achieve parity between men and women.

C. Project Cost and Financing

63. **The summarized project cost and financing is outlined in Table 8 below.** The Project comprises 3 DLIs with Disbursement Linked Results (DLRs). Some DLIs are scalable. The WB Financial Management Guidelines will apply to the eligible expenditure program.

Table 8: Project Cost and Financing



Component 1. User-Friendly Institutional and Digital Delivery Solutions (US\$16.3 million)	
1.1. Improving Social Protection Delivery Efficiency, Accountability, and User-Friendliness	
Social assistance: cash and benefit transfers	
Social survey (conception and data collection for the database of the poor)	3.9
TA: targeting, user experience, case management, monitoring and evaluation	0.2
Business process modeling and reengineering	0.2
Subtotal	4.3
Social Security: Pensions and Health Insurance	
Digital payment module and data integration with tax directorate	0.2
Business process modeling and reengineering & Development	0.3
Mobile Service Units (for Social Protection services)	1
Expansion of universal health care cards	2.7
Sub-total	4.2
1.2 Improved Education Delivery Efficiency, Accountability, and User-Friendliness	
Education Management Platform and Services	
Digital education management platform, with online enrollment and authentication based on identifier	2
National examination management system	0.4
Business process modeling and reengineering & Development	0.7
Sub-total	3.1
Digital Learning Management System	
Define and develop business model for digital learning content	0.2
Digital learning content	1.3
Sub-total	1.5
1.3. Improving Access and Quality for All: Digitized Access Points promoting digital inclusion	
Improving and Expanding Digitized Access Points	3.2
Sub-total	3.2
Total Component 1	16.3
Component 2: Public and Private Sector Capabilities for Speedier and Responsive Service Delivery (US\$41.4 million)	
Subcomponent 2.1. Improving User-Oriented Identification and Interoperability	
Social Protection User Identification	
Improving the social identifier system	0.5
Study on Enterprise Architecture	0.5
Strengthening IT infrastructure for national cloud strategy	0.2
Improve social assistance information system and case management	1.5
Strengthening sectoral interoperability capability	1.6
Sub-total	4.3
Education User Identification	
Student Register	0.3
Management Information System	0.3
Interoperability solution	0.3
Strengthening IT infrastructure for national cloud strategy	5.1
Revamp Edunet portal	0.3
Sub-total	6.3
Subcomponent 2.2. Improving Service Performance and Citizen Engagement	
Public Service Delivery Barometer	1.8
Sub-total	1.8
Subcomponent 2.3. Strengthening Capacity and Change Management	
General Technical assistance and training activities, and studies	1.6



Social Protection – Change management/collaborative leadership, external/Internal communication and personnel training	2.4
Education – Change management/collaborative leadership, external/Internal communication and personnel training	4.1
User awareness with digitized access points	0.9
Sub-total	9
Subcomponent 2.4. Incentivizing Key GovTech Reforms (3 DLIs)	
Sub-total	20
Total Component 2	41.4
Component 3: Reinforcing Connectivity in Education and Social Protection for more Equitable Access to and Quality of Services (US\$ 42.3 million)	
Subcomponent 3.1 Indoor Connectivity to Deploy the New Service Delivery Solutions in areas with Sufficient Outdoor Connectivity	
LAN/Wi-fi in Social Protection Units	0.3
LAN/Wi-fi in Digital Access Points	0.1
LAN/Wi-fi in Schools	9.3
Sub-total	9.7
Subcomponent 3.2 Indoor and Outdoor Connectivity to Deploy the New Service Delivery Solutions in areas with Insufficient Outdoor Connectivity	
Network Coverage and Quality (WAN and LAN) in primary and secondary schools	32.6
Sub-total	32.6
Total Component 3	42.3
Total	100

D. Sustainability

64. **The Prime Minister and the Council of Ministers have identified Digital Transformation in Tunisia, including GovTech, as a top priority.** This has resulted in the formation of a Special Inter-Ministerial Committee (January 2019) on Digitalization that is Chaired by the PM, covering all digitalization programs across the country, including but not limited to GovTech. There is also a cross-party political consensus on the relevance and importance of the digital transformation agenda. Furthermore, GovTech and public sector administration reforms supported by the project are aligned with the relevant strategies as outlined above.
65. **Institutional capacity and coordination challenges within and across sectoral ministries could affect sustainability, hence the strong emphasis on building collaborative leadership and change management capacities.** The resistance from some stakeholders to aspects of digitization presents a risk. Risk mitigation measures are outlined in the risk section. Reforms are also expected to generate tangible benefits for citizens, which would strengthen reform constituencies. Moreover, the emphasis on transparency and feedback is expected to provide a mechanism for external stakeholders to voice their concerns and preferences and exert pressure to prevent backtracking on key reforms.
66. **Sustainability of the activities will be increased through several mechanisms.** This includes: supporting the development of sustainable business models and plans for solutions provided under the three components; ensuring that there are dedicated state budget lines assigned to the key solutions and that there is mobilization of public and private resources to sustain and expand the activities; and, providing value-for-



money and efficient solutions to help reduce prices.

IV. PROJECT APPRAISAL SUMMARY

A. Economic Analysis

Social Protection

67. **Benefits of the investments in ICT technology and systems in the social protection sector are expected to be substantial.** Benefits come mainly through: (a) time and cost savings to beneficiaries, (b) reduced administrative costs, (c) reduced errors due to better targeting and verification of eligibility; (d) reduced waste of budgetary resources; and (e) other benefits. Currently existing data allow only for calculation of benefits of the time and travel cost savings of applicants to the programs. Details are below.

68. **Reduced time and travel costs for applicants.** About 60,000 people apply for social assistance programs each year and about 13,000 self-employed people enroll in the social security system. Applicants currently make an average of two and a half trips to government offices, and spend an average of five hours, including travel time, to get information about the programs, to complete and submit documentation, to follow up, and to periodically reconfirm their eligibility for the programs. By reducing the number of documents that applicants are required to submit and by digitizing back-office functions, allowing government officials to more rapidly determine a person’s eligibility for the programs, an applicant is expected to save three hours (equivalent to US\$15.00) and make an average of one and a half trips (equivalent to US\$5.00).⁴²

69. **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\$2.8 million.⁴³ The annual cost for maintenance is estimated to be 20 percent of the capital cost over a period of 10 years.
- **Discount rate.** A discount rate of 5 percent was used, in line with World Bank guidance.

70. **The main assumptions underlying the analysis are:** (a) installation period of one year; (b) benefits start to flow from year two and continue for 10 years; and (c) applicants save an average of US\$20, considering both time and travel cost savings, as described above.

Table 9: Economic analysis of the time and travel cost savings of investments in ICT for social protection and social security

	Base case	Scenario 1 (costs up by 20%)	Scenario 2 (benefits down by 20%)	Scenario 3 (costs up by 20% and benefits down by 20%)
Net present value	US\$4.0 million	US\$2.6 million	US\$1.8 million	US\$0.5 million
Internal rate of return	30 percent	20 percent	17 percent	8 percent

⁴² 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

⁴³ All capital cost figures are estimates, as investments will be determined only after technology needs studies have been carried out during the first year of project implementation.



71. **The digitization provides significant benefits for the social protection sector that cannot be quantified, due to lack of data.** These include (a) reduced administrative costs; (b) reduced targeting errors; (c) reduced waste of budgetary resources; and (d) other benefits. Details are below.
72. **Reduced administrative costs.** By introducing electronic means of tracking applications, processing payments, and other administrative tasks, the project is expected to significantly reduce administrative costs. By introducing technology in the local offices of the Ministry of Social Affairs, the time spent processing applications is expected to drop by 50 percent compared with the paper-based methods. In addition, introduction of an interoperable platform for use by local offices, is expected to reduce the time required for the initial screening of applications (about 75 percent of applications are currently screened out at local offices).
73. **Reduced targeting errors.** The lack of a social registry and of a unique identifier leads to poor targeting and verification of eligibility for both the cash transfer and indigent health insurance programs. By supporting the social registry, a unique social identifier, and a grievance redress system, it is expected that the project will improve the targeting of the social protection programs. In addition, current paper-based beneficiary cards contribute to a weak governance of access system to health providers, as people can access health services without a proper authentication. The introduction of digital universal health cards is expected to improve the governance of the health insurance system.
74. **Reduced waste of budgetary resources.** The creation of a social registry is expected to improve the ministry's capacity to execute the program budget. Currently, about 3.2 percent of beneficiaries of the cash transfer program do not claim their benefits (8,000 of 250,000 beneficiaries). This means that 3.2 percent of the program's funds are not allocated. In addition, around 13 percent of quotas available for the cash transfer program were not used in 2018, implying that about 37,000 people in need did not benefit from the cash transfer program. The establishment of the social registry and the digitization of functions are expected to reduce the unclaimed benefits and improve the ministry's capacity to execute the program budget, delivering resources to people in need.
75. **Other benefits.** User satisfaction with accessing services is expected to rise, a benefit that cannot be quantified. In addition, increasing enrollment in social security will provide significant benefits to low-income workers. Currently, over 50 percent of low-income self-employed workers are not paying into the social security system every quarter, and risk being without (or with a very low) pension when retired. Through expanded outreach and simpler enrollment applications and payment processing, the project aims to ease the enrollment of low-income and self-employed workers in the social security system and improve the frequency and amount of contributions. Studies from other countries show that when people receive a regular minimum income, they are healthier, both mentally and physically and are less likely to require emergency health services. Their family members are also healthier, and their children are less likely to drop out of school.

Education

76. **Benefits of the investments in ICT technology and systems to in the education sector are expected to be substantial.** Benefits come through three main channels: (a) reduced time and travel costs of parents



enrolling their children in school, (b) reduced administrative costs, and (c) better learning outcomes. Data exist to quantify only the benefits of time and travel cost savings of parents enrolling their children in school. Details are below.

77. **Reduced time and travel costs for beneficiaries.** About 1,100,790 students are expected to enroll digitally in primary school each year and about 894,305 students to enroll digitally in secondary school (middle and high schools), due to the introduction of digital enrollment systems, an increase in digital access points, and simplification of the process under the Project. Parents are expected to save two hours (equivalent to US\$10.00) and one trip (equivalent to US\$5.00) in enrolling their children in school.

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

- **Capital and maintenance costs.** The capital costs of the new systems are estimated to be US\$25 million. The annual cost for maintenance is estimated to be 20 percent of the capital cost over a period of 10 years.⁴⁴
- **Discount rate.** A discount rate of 5 percent was used, in line with World Bank guidance.

79. **The main assumptions underlying the analysis for digitalization of school administrative tasks are:** (a) installation period of one year; (b) benefits start to flow from year two and continue for 10 years; (d) parents save an average of US\$15, considering both time and travel cost savings, as described above.

Table 10: Economic analysis of the time and travel cost savings investments in ICT for the education sector

	Base case	Scenario 1 (costs up by 20%)	Scenario 2 (benefits down by 20%)	Scenario 3 (costs up by 20% and benefits down by 20%)
Net present value	US\$33.2 million	US\$21.1 million	US\$14.4 million	US\$2.3 million
Internal rate of return	28 percent	18 percent	16 percent	7 percent

80. **The digitization of school management provides significant benefits for the education sector that cannot be quantified, due to lack of data.** Digitizing tasks such as student attendance, student schedules, homework assignments, exam grades, and other tasks is expected to reduce administrative costs by 25–90 percent, based on results of similar projects in other countries. This will allow the resources now allocated for administration to be used to improve the quality of teaching, facilities, and the like. Automation will allow school officials to send parents and students alerts on issues such as school attendance, upcoming exams, and behavior reports, thus deepening engagement of parents in their children’s education. This is expected to result in higher rates of school attendance, reduced drop-outs, better learning outcomes, and ultimately higher lifetime earnings for graduates (each additional year of schooling provides a return of about 8–10 percent, according to some estimates). Digitization also improves school security, by tracking in real time who is present and where. Finally, digitization reduces the risks of data loss, such as exam results.

Other Government Services Delivered through Digitized Access Points supported under the project

⁴⁴ All capital cost figures are estimates, as investments will be determined only after technology needs studies have been carried out during the first year of project implementation.



81. **The Digitized Access Points will provide access to multiple other government services beyond the four flagship programs (see Boxes 1 and 2), which are expected to provide significant benefits.** Quantifiable benefits come through time and cost savings to beneficiaries. The 69 newly established digitization access points (including mobile service centers) are expected to serve about 2,220,000 beneficiaries per year starting in 2021. Each beneficiary is expected to save an average of one hour (equivalent to US\$5.00) and one trip (equivalent to US\$5.00 in travel costs) in accessing services, including time required to gather information, apply, and follow up.

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

- **Capital and maintenance costs.** The capital cost of each new digitized access point is estimated to be US\$250,000 (including structures and equipment), the total for 69 is estimated to be US\$17.25 million. The annual cost for maintenance is estimated to be 10 percent of the capital cost over a period of 20 years.⁴⁵
- **Discount rate.** A discount rate of 5 percent was used, in line with World Bank guidance.

83. **The main data underlying the analysis for connectivity are:** (a) construction period of one year; (b) benefits start to flow from year two and continue for 20 years; (c) beneficiaries save an average of US\$10 per year, considering both time and travel cost savings.

Table 11: Economic analysis of the time and travel cost savings of investments in Digitized Access Points

	Base case	Scenario 1 (costs up by 20%)	Scenario 2 (benefits down by 20%)	Scenario 3 (costs up by 20% and benefits down by 20%)
Net present value	US\$226.5 million	US\$219.1 million	US\$173.8 million	US\$166.4 million
Internal rate of return	119 percent	97 percent	93 percent	76 percent

84. **The establishment of the Digitized Access Points will provide significant benefits that cannot be quantified.** Citizens that would otherwise not receive a service because the time and travel costs were previously prohibitive will now be able to access it. 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.

Shared Digital Platforms and Services

85. **The project investments in shared digital platforms and services, including cloud services, interoperable platforms, and the like are expected to provide significant benefits.** Specifically, 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 and agencies. Studies from other countries show that moving to a centralized shared digital system, governments can save at least 15 percent of operations and maintenance costs.

⁴⁵ All capital cost figures are estimates, as investments will be determined only after assessments of required investments have been carried out during the first year of project implementation.



Connectivity Spillover Benefits

86. **As connectivity is an enabler and prerequisites of the improved services mentioned above, the economic benefits of improved connectivity are automatically calculated in the above estimations.** That said, while it is not easily quantifiable one can assume that the connectivity gains will have spillover economic effects through several aspects:

- (a) General positive economic effects will be achieved in the telecoms sector (via the procurement design and the DLIs) through: (a) increased openness and private sector competition to improve efficiency and the running of a large value-for-money tender with a new service approach which will set a more cost-effective standard for future connectivity investments and will reduce prices. Furthermore, as per international experience, additional economic spillover effects of improved “open access” high-speed broadband connectivity – including in the lagging regions – include employment benefits stemming from network development and services, and the stimulation of the local private sector to equip schools with indoor connectivity and services.
- (b) Improvements of school connectivity with ultra-fast broadband allows better access of companies and households to the internet, as the school network covers most of the Tunisian territory. In addition, the project aims to improve the quality of connectivity service that will benefit customers of telecom operators who are businesses and citizens.
- (c) The maintenance of active and passive equipment will create local business opportunities for the development of telecom operators who own the network or the indoor infrastructure of the schools through local private businesses. This will also integrate young professionals and startups, as the MoE has signed an agreement called the "new generation of entrepreneurs" to create 70 small businesses to maintain school buildings, and 25 other small businesses for maintenance and repair of ICT and network equipment, and 5 others for content creation; and,
- (d) Improving access to connectivity in digitized access points and schools will enable the most vulnerable families to access public services and help reducing the economic dimensions of the digital divide.

B. Fiduciary

Financial Management

87. **A Financial Management Assessment (FMA) was carried out in accordance with the World Bank Policy on Investment Project Financing to evaluate the adequacy of financial management arrangements for the implementation of the project.** This assessment reflects the financial management arrangements of the MTCEN, responsible for implementing and carrying out the fiduciary activities of the project.

88. **Risk assessment.** The MTCEN’s financial management arrangements which are based on Tunisia’s financial management systems are generally acceptable and provide reasonable assurance on the use of the Project’s resources for the intended purpose. MTCEN has experience in managing World Bank funded projects (P088929⁴⁶). However, considering the project-specific arrangements (around 4 implementing entities and the results-based financing mechanism), the financial management risk is assessed as **Substantial**. The main risks and weaknesses are related to (i) the complex institutional arrangements; (ii) the risk of double dipping

⁴⁶ The project amounting to US\$100 million was closed in 2011 with a satisfactory FM rating. The MTCNE submitted semi-annual financial monitoring reports and annual audit reports in a timely manner and in a format and content acceptable to the Bank. The audit opinions were unqualified.



in the Eligible Expenditure Program (EEP); (iii) the risk associated with the lack of ICT equipment; and, (iv) the lack of experience of the Ministerial Inspectorates to act as an Independent Verification Agent of the Disbursement Linked Indicators.

89. Mitigation measures. To mitigate the identified risks and weaknesses, the following measures have been identified: (i) reliance on, and institutionalization of, the existing Delivery Unit (DU) set up for the management of the AfDB project, (ii) the development of a procedure manual including financial management section, (iii) the programming and budgeting of the IT equipment, and (iv) the General Control of Public Service (*Contrôle Général des Services Publics – CGSP*), whose capacity is found to be adequate, will act as an Independent Verification Agent of the DLIs. The expenditures associated with the National Assistance Program for In-Need Families (*Programme National d’Assistance aux Familles Nécessiteuses – PNAFN*) meet the criteria for inclusion into the project’s EEP and are eligible for reimbursement by the World Bank under the project.

90. Financial Management arrangements. The MTCEN, through the PMU (Delivery Unit), will implement the project and will be responsible for the overall fiduciary oversight including financial management. The PMU will rely on fiduciary focal points to be appointed in the beneficiaries’ line ministries. The processing of the payment will be performed by the PMU and executed by the Central Bank of Tunisia. The country financial management systems will be applied such as budgeting, accounting, internal controls (which include the segregation of duties between the payment authorizer and the public accountant as well as the ex-ante control by the financial controller, funds flow, financial reporting and external audit. This will be complemented by the provisions of the PMU’s manual of procedures. The project’s annual activities will be approved with the Bank and included in the MTCEN and beneficiaries’ line ministries annual budget. The national information management systems respectively ADEB (budgeting) and SIADE (treasury) will also be used. Primarily financial data to prepare the interim financial report will be generated from these systems and used to elaborate the project’s financial reporting statements. Two accounts will be opened at the Central Bank: i) a designated account to house investments funds; ii) a specific account for disbursing DLI funds that will be transferred thereafter into the treasury current account. Calls for funds for DLIs will be executed by the MoF based on verification reports in line with the provisions set forth in DFIL. These funds will be used to fund activities managed and implemented by MTCEN and relevant line ministries. The internal audit will be under the responsibilities of the Inspectorate of the MTCEN. The General Control of Public Service will act as an Independent Verification Agent of the Disbursement Linked Indicators. The external audit will be carried out by the General Financial Control (*Contrôle Général des Finances*)⁴⁷ based on agreed Terms of Reference.

Procurement

91. Institutional arrangements. Project’s procurement will be carried out by the PMU (DU) to be reinforced at the level of MTCEN (See Institutional Arrangements above).

92. MTCEN’s Capacity Assessment and procurement risk rating. This assessment of MTCEN capacity considers the MTCEN experience in carrying out similar procurement as well as foreseen nature of the expenditures and the likely size and complexity of the contracts under the GovTech project. MTCEN is currently implementing an AfDB-funded Support Project for the implementation of the “Digital Tunisia 2020” National Strategic Plan through a DU linked to the Information Technologies General Directorate. The assessment has revealed shortage of human resources within the executing agency. Thus, challenges related to institutional

⁴⁷ in line with the existing external audit arrangements for the donors-funded projects.



bottlenecks and procurement delays are foreseen under the GovTech project. To mitigate the identified risks, the following measures are proposed: (i) train the PMU staff on the Bank's Procurement regulations in general and on the Banks Standard procurement documents for the procurement of IT systems, in particular; (ii) designate the key members of the PMU, namely a Procurement Specialist (PS) whose experience and professional qualifications have previously been satisfactory to the Bank; (iii) make sure that the Project Manual of Procedures clearly describes how procurement operations will be carried out in an optimized way to support the development objectives of the project and deliver value for money; and, (iv) provide capacity building and expertise (via Component 2) and via available grant financing (where available).

93. **Procurement arrangements.** Procurement for the project will be carried out in accordance with World Bank Bank's Procurement Regulations for IPF Borrowers (Regulations), July 2016 edition, revised in November 2017, and August 2018, and the provisions stipulated in the Legal Agreement. The project will be subject to the Bank's Anticorruption Guidelines ('Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants'), dated October 15, 2006, and revised in January 2011 and July 2016.
94. **Project Procurement Strategy for Development (PPSD).** Considering the substantial procurement risk and the size of the contracts to be procured under the project, a short form procurement strategy for development (PPSD) has been elaborated by MTCEN with the Bank support in accordance with the Bank's procurement regulations. The PPSD has addressed how procurement activities will support the development objectives of the project and deliver innovations, and the best Value for Money (VfM) under a risk-based approach. Further details are provided in the PPSD.
95. **Procurement Planning.** The project's Procurement Plan is being prepared based on the analysis in the PPSD and this is subject to the Bank's no objection. The initial Procurement Plan will cover at least the first eighteen (18) months of the project implementation. The Procurement Plan should be updated periodically to reflect actual needs and changing circumstances. Any updates to the Procurement Plan should be submitted to the Bank for its review and no objection. Any changes to the Procurement Plan should be justified, as appropriate, by the Borrower through a revised PPSD.
96. **Procurement of the connectivity services.** Because of the nature and complexity of the connectivity contracts (tele/data communications is a regulated market for services), the MTCEN's business needs can be better met by allowing Proposers to offer customized solutions or Proposals that may vary in the manner in which they meet the service performance requirements. The packaging (number and typology of lots) will be further detailed by effectiveness, following the Feasibility diagnostics (component 3). As to the contract type, it will be a single (or several) responsibility service contract(s) ("*de bout en bout*") - which respond(s) to MTCEN concerns and also accommodates Bank's procurement requirements through a multi-stage and innovative procurement process.
97. **Use of the Systematic Tracking of Exchanges in Procurement (STEP).** MTCEN will use STEP. STEP is an online system to help the World Bank and MTCEN plan and track procurement activities under the project. STEP enables auto publication of approved procurement plan, publication notices and contract award information in the Bank's external website, UNDB online, World Bank Finances App, and World Bank Procurement App.



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

The main environmental impacts/risks of the project are linked to component 1 and 3 and may include terrestrial and aquatic habitat alteration, visual impacts, hazardous materials and waste management, electric and magnetic field, emission to air, noise and Occupational Health and Safety hazards during construction and some Community Health and Safety issues during operational phase. Social risks and impacts related to the project may include, but not be limited to, those related to management of labor in project units and for contractors, to engagement of stakeholders, public consultations and participation during project design and operation including management of grievances and expectations, and land acquisition for physical infrastructure to be constructed under the project.

98. **Key Features of the Project.** The project has a country wide coverage, including both in urban, sub-urban and rural areas, in the six regions of the country. Components 2 and 3 will stimulate investments in: (i) laying of underground fiber optic cables; (ii) construction of transmission towers, and, (iii) buildings/construction/rehabilitation for server rooms and one stop shops (or citizen service centers) (iv) LAN (indoor) and WAN (outdoor) network installation. Public facilities to benefit from these investments will include but are not limited to: schools and social protection facilities. Some but not all specific construction sites have, however, yet to be selected, and the technical design of the infrastructure will be stipulated in the procurement packages. The proposed physical investments may cause risks/impacts that are relevant to the Environmental and Social Standards (ESS). Project physical investments are, however, not expected to involve activities that have a high potential for harming people, or the environment and they are located away from environmentally or socially sensitive areas. Further, civil works such as laying fiber optic cables, construction of various structures will be confined within selected public facilities, and optic cables will be buried in the right of way of roads and sidewalks, without the likelihood of impacts beyond the actual footprint of the works. These risks and impacts can be mitigated in a predictable manner. Land acquisition is expected, but it is deemed to be limited and be site specific, and is highly unlikely to induce physical displacement, partial economic displacement, however, cannot be excluded.

99. **Risk Rating and Mitigation Measures: project environmental and social risks are deemed moderate.** The rating draws from the assessment of the potential adverse risks and impacts on human populations and/or the environment linked to the physical infrastructure constructions/rehabilitations of: transmission towers; data centers and laying of broadband optic cables, in the right of way of sidewalks and roads. The main points:

- The anticipated environmental and social risks/impacts (occupational and community health and safety, and Electro-Magnetic Field emissions during operational phase, land acquisition) of these investments are not likely to be significant and can be easily mitigated in a predictable manner. Additional risks/impacts, particularly social, may include, but are not be limited to: land acquisition; social exclusion; poor management of labor in project units and for contractors, exclusion of groups



- which are economically or socially vulnerable; and poor management of grievances and expectations. These risks are expected to be of low magnitude, site specific, predictable, temporary and reversible.
- Civil works will be confined within selected public facilities, broad band optic cables will be buried in the right of way of roads and sidewalks, without likelihood of impacts beyond the actual footprint of the works.
 - As site specific construction sites have yet to be finalized and the technical designs of the infrastructures will be specified in the procurement package, an Environment and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF) have been prepared to address potential environmental and social risks. The ESMF and an RPF were prepared and disclosed in country and at the World Bank by appraisal:
 - a. The ESMF screens out substantial/high risk subprojects and contains provisions to ensure labor aspects, including child labor and labor influx, are properly addressed in the documents prepared during project implementation, including Environmental and Social Management Plans (ESMPs), bidding documents, and civil works contracts and to ensure proper consultation with project beneficiaries.
 - b. The RPF establishes guidelines for screening social risks related to involuntary resettlement and provides guidance for mitigation measures and instruments. The RPF concluded that the project is unlikely to induce physical resettlement. Limited, partial economic displacement is expected. The preliminary estimate of the RPF suggests that - / + 12000 people may be partially affected by project activities in priority areas and about - / + 50,000 people across the country. Properties or assets expected to be potentially affected are: strips of land along sidewalks and rural roads, pieces of fences/walls, pieces of urban or rural land for tower constructions. Areas and size of impacts will be known, once sub-project locations have been established and detailed designs of the sub-subject has been completed. The RPF estimate is generic, based on project activities, number of beneficiary governorates and their populations. Resettlement action plan/s (RAPs), will be prepared in line with the guidelines of the RPF, as need be.

100. **Client's Environment and Social Standards (ESS) capacity.** Client's institutional ESS capacity is weak; however, it will be strengthened through capacity building and human capital in the form of consultants to support social risks assessments and implementation of mitigation measures. A stakeholder engagement plan (SEP) has been prepared prior to appraisal to strengthen project ownership and prevent potential conflicts between beneficiaries, likewise, a grievance redress mechanism will be put in place. All ESS apply to the project, the most relevant of which being: ESS 1 Assessment and Management of Environmental and Social Risks and Impacts; ESS 2 Labor and Working Conditions; ESS 3 Resource Efficiency and Pollution Prevention and Management; ESS 4 Community Health and Safety; ESS 5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement; ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources; and ESS 10 Stakeholder Engagement and Information Disclosure.

101. **Stakeholder Engagement and Consultations.** Project design involves multiple stakeholders. The lead among stakeholders, is the Ministry of Technology, Communication, and Digital Economy (MTCEN), responsible for the implementation of the national policies and programs in telecom and ICT infrastructure, and e-government. Other key stakeholders include: the Ministry of Education, the Ministry of Social Affairs, the Strategic Council on Digital Economy, and The Electronic Administration Unit and the Direction of Reforms and Future Planning in the Ministry of Civil Service. Governance of the project will be ensured by a steering committee composed of the various ministries and chaired by the MTCEN. Additional stakeholders beyond



the ministries and the implementing agencies, will include: the chambers of commerce or similar; labor union representatives; other CSOs involved in representation of enterprises and employees; municipalities and other regional and local elected representatives; representatives of the civil society; NGOs and directly impacted project affected parties (PAPs); disadvantaged and vulnerable groups, including women stakeholders. During project preparation, consultations were carried out with all key stakeholders, to inform the design and content of the project, and ensure ownership. Additional consultations including regional and local elected representatives; representatives of the civil society; and NGOs were carried out in conjunction with the preparation and finalization of the ESMF and the RPF. Consultations will be a continuous activity throughout project implementation. The client has prepared a Stakeholder Engagement Plan (SEP) prior to appraisal. The SEP includes both other interested parties (OIPs) including gender aspects, various beneficiaries and directly impacted project affected persons (PAPs). Project stakeholders will be engaged throughout the project, proportionate to the project cycle processes.

102. **Key Environmental and Social Commitment Plan (ESCP) Measures Agreed with the Client are:** i) establish an organizational structure with qualified staff to support management of E&S risks including an E&S focal point to be responsible of day to day implementation of ESMF and CPR; ii) prepare and implement a labor management procedure including, before effectiveness; iii) prepare and implement the arrangements for the grievance mechanism for resettlement (if established separately from the grievance mechanism, before Prior to commencement of resettlement activities; iv) ensure that monitoring and reporting on land acquisition and resettlement activities are conducted separately or as part of regular reporting throughout the project period; v) prepare and implement ESMPs and RAPs prior to any commencement of civil works; vi) incorporate the obligation of preparation of Environmental Health and Safety (EHS) plan into contractual agreements with contractors together with appropriate noncompliance remedies, prior to the preparation of procurement documents; vii) obtain or assist in obtaining, as appropriate, the permits, consents and authorizations that are applicable to the Project from relevant national authorities, prior to any commencement of civil works; viii) prepare an E&S Capacity Building Plan that shall include clear timeframe and budget for building capacity of MTCEN and other stakeholders, before project effectiveness; ix) will submit semiannual E&S performance reports to the World Bank within 60 days after end of the calendar year, throughout the project period; x) Implement the SEP throughout the project period.
103. **Monitoring of ESCP.** Monitoring of ESCP mitigation measures will be carried out throughout project implementation. The client will carry out day to day supervision supported by the supervision consultants of the contracts. Every six months, the client will provide a biannual ESS report to the Bank. The report should include the occurrence of incidents or accidents related or having an impact on the Project which has, or are likely to have, a significant adverse effect on the environment, the affected communities, the public or workers. The Bank will carry out its due diligence through periodic supervision missions and document its findings in the aide memoires.
104. **The operation aims to meet the corporate requirements for Beneficiary Feedback in terms of public services improvement.** It does so primarily through the Barometer (component 2) which should reflect user feedback, ensure user feedback informs policy recommendations, and that these are implemented by relevant agencies. A dedicated Results Framework indicator highlight this aspect.



E. Gender

105. **The operation aims to meet the corporate requirement for the Gender Tag.** It does so by mainstreaming certain gender-based mechanisms into the operational design. Based on the prior diagnostic work on digital divide and women to identify the disparities of relevance to the operation (see Box 5 and Annex 4), the project incorporated actions to address some of these disparities, notably by addressing rural women’s needs in accessing services through: (i) mechanisms within digitized access points to serve the needs of women (see Annex 4); (ii) communication campaigns which are tailored to address specific needs of the women (see Annex 4, #5); and, (c) disaggregating the measurement of service delivery access and quality by gender in the Barometer (Component 2) and the Results Framework (PDO 2 and 3).

Box 5: The Digital Divide and Gender in Tunisia

Diagnostics were undertaken during the preparation of the operation to look at issues of the Digital Divide and the Gender dimensions of this divide (World Bank, 2018; PWC, 2018⁴⁸). Diagnostics were based on combined methods, including literature review and qualitative approach such as focus group discussions and interviews. Key findings include the following. Constraints to internet access is especially prevalent among households in rural areas, including young women and men. The digital gap between rural and non-rural households is significant whereby broadband Internet coverage was 7 percent among rural households in 2015, compared with 38 percent among urban households. The gender digital divide is found to be especially large in these areas (World Bank, 2018). Beyond network quality and coverage, several studies have established other dimensions such as employment status, education, and income levels that can act as confounding variables that contribute to a gender digital divide. Published reports find that women are at a significant disadvantage compared to men with relation to these factors: around 50 percent of young women in rural Tunisia are not in education, employment or training; compared to about one in three young men (WB 2012). Furthermore, the national illiteracy rate is twice as high for women than men (25.6 percent vs. 12.8 percent); with higher ratio in rural areas where female illiteracy rates can reach 40 percent compared to 23 percent for men (National Institute of Statistics 2014). More broadly, the gender gap in mobile internet use is considerably wider than the mobile ownership gap in low and middle-income countries, according to “The Mobile Gender Gap Report 2018” (GSMA Connected Women).

F. Climate

106. **The operation also builds in mechanisms to attain the maximum of climate co-benefits, within the existing design and scope of the operation.** By FY20, per the World Bank *Climate MENA Action Plan (2016-2020)*, the Region has pledged to raise co-benefits to 30 percent of all IBRD/IDA lending and increase the share of adaptation financing to 50 percent of overall co-benefits. Due to climate change, Tunisia is predicted to experience increased temperatures, reduced precipitation and increased climatic variability. Increased temperatures (an estimated 1-2C by 2030) will push water consumption, while lower precipitation (an estimated 5-10 percent drop) will reduce supply. Increased variability will make droughts and floods more frequent and severe. In 2016 and 2017, Tunisia faced severe drought, which for the first time, resulted in a substantial reduction of water allocations. In 2018, the agriculturally-rich and tourism-focused coastal governorate of Nabeul faced severe floods resulting in important infrastructural damages and impacting the livelihoods of the most vulnerable segments of the population⁴⁹

⁴⁸ PWC was commissioned to undertake a range of diagnostic work which informed the preparation of this operation. This diagnostic work covered an analysis of the needs of women and further analytical work is ongoing to undertake surveys on the identified surveys, which will also be disaggregated by gender.

⁴⁹ Climate change thus represents an important risk for Tunisia. Floods, drought and water security in particular, which are already under threat from current climate variability and social, economic, and environmental change, are likely to be under greater threat. These patterns will have multidimensional effects



107. **Given these climate-related hazards, the potential impacts on the project’s interventions, target sectors and target vulnerable populations are the following:**

- *Increased Poverty and Vulnerability:* an increase in disaster-related impoverishment would put pressure on the social safety net and social security systems that target poorer groups in rural areas, often dependent on agriculture;
- *Assets and Equipment:* there may be destruction or degradation of assets (such as ICT infrastructure and equipment, or local integrate digital access points) due to extreme events and natural disasters, which would impact on the sectors and services; electricity/network outages would, of course, render the operation’s digital services unusable;
- *Institutional:* the public administration, and operational PMU, may not have the capacity to respond effectively to disasters or to build in effective adaptation mechanisms; and,
- *Energy:* Increase in energy usage due to drought, with a knock-on impact on connectivity and network servers.

108. **The operation will address climate-related risks via the following activities:**

- *Connectivity:* the improved connectivity resulting from this component could contribute to the development of digital public systems for early warning of climate-induced disasters. Better connectivity could be leveraged to assist the authorities in the prediction of extreme events to ensure both the citizens and government agencies would be able to prepare to adapt to the impact of disasters. In the case of improved early warning, citizens could start preparing food stores and supplies to weather the impacts of the drought, for instance, to ensure their families are sustained, and the government could use such information to ensure that aspects like water management strategies (irrigation), food supply and medical supplies will be able to sustain the population. To further elaborate:
 - Infrastructure sharing (contemplated in the Digital Law “Code du Numérique” and in the project design: see sub-component 2.4) will promote energy efficiency. There is a possibility that where there is a lack of ICT coverage but presence of enabling infrastructures, the broadband operator could use that dark fiber (from transport infrastructure or electricity transmission lines) to reduce deployment costs (as has been done in many connectivity projects such as Gabon or Senegal “implementing a PPP to sell excess capacity of the SOGEM-fiber optic network to improve regional connectivity - P159668”)
 - The wholesale operator model (see Component 3) involves sharing infrastructure among different providers as mentioned above and the open access principle (that will be included in the tender documents) will also minimize infrastructure duplication as any additional telecom operator will be able to re-use that existing fiber to provide broadband connectivity services without the need to lay new fiber infrastructure.
 - The end-to-end responsibility contracts (services turnkey contracts) will also promote the use of new and advanced technologies that will be more efficient than old and replaced technologies (e.g. evolution of network equipment and energy saving). The tender documents can also include a clause on recycling and using materials that have no adverse impact on climate, and the equipment can be upgraded and replaced (e.g. LAN) when technologies evolve due to the

on the Tunisian economy, affecting agricultural productivity, energy use, water dynamics, and the livelihoods of vulnerable populations whose income is linked to these factors. Efforts to promote climate resilience in these key sectors will have important longer-term effects. As precipitations and temperature levels worsen and extreme events such as droughts become more intense, there is an even greater need to implement concerted, multi-sectoral solutions to the most affected areas, notably the agriculturally-dependent northwest and the tourism-focused coastal regions, in an integrated manner.



procurement modality. Also, wherever suitable and feasible, Wi-Fi and Fixed Wireless Access (FWA) technologies can be promoted to reduce cabling (wireless Local Area Networking) as a viable solution for broadband access. Additionally, some sites would be able to use solar energy power source (main or alternate) and therefore mitigate adverse climate impact. Finally, by improving broadband connectivity, this will enable implementation and outreach of e-services across the territory (other 2 components in the operation), access to e-services will help to reduce the time and the frequency of visits/movements required for citizens to obtain selected services, as they physically had to go to the public administration outlets for some procedures and for instance on the SP and Education side, some could be done online and in less stages.

- *Supporting the climate resilience of vulnerable populations:* the operation's target vulnerable populations – poor households, low-income women, non-salaried temporary agricultural workers, pensioners and illiterates – are the most vulnerable to climate-related risks. The operation will improve their access to services and welfare, thus preparing them better for dealing with climate-related risks. Improving the socio-economic well-being of these groups is known to increase a nation's resilience to climate-induced extreme weather. Moreover, the elderly and disabled, who are more vulnerable to the impacts of climate change and who tend to have less income to adapt to it, will be positively impacted by the program through the improvement in pension services. This will contribute to adaptation of infrastructure in homes, better nutrition during droughts due to the accessibility of additional funds for households and better health care for climate-induced illnesses. In addition, the Social Protection delivery system, which will be supported under this project (Components 1 and 2), will be adaptive to accommodate different programs, including programs to address climate vulnerability such as disaster response, as the targeting approach would heavily focus on geographic characteristics.
- *Improving identification and targeting:* the operation's creation of citizen identifiers and databases (which specifically focus on the most vulnerable groups) would help the government to respond better to extreme weather when it happens, through better identification and quicker transfer of safety net mechanisms. Notably, the registry in the MSA (Components 1 and 2) includes information on climate vulnerability in the sense that GPS information (georeferenced) is collected for each household in the registry. In addition, information includes source of energy for each household. Such a registry has been developed and used in many other countries for disaster risk management and disaster response and could be leveraged in this operation (i.e. what is called an adaptive social protection system which can be used for many different purposes, including in the context of the Disaster Risk Management program currently under development in Tunisia).
- *Mainstreaming through the Environmental and Social Framework (ESF):* this will mitigate against negative social and environmental impacts (in itself contributing to climate preparedness); and utilize the most energy efficient measures and technologies in all investments under the operation.

G. Grievance Redress Services

109. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB'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 WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB 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 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

V. KEY RISKS

110. The overall risk of the project is rated as substantial, notably given the high-specification ICT procurements and the need for a high level of institutional coordination. Table 12 summarizes the substantial and high risks and their mitigation measures.

Table 12: Key Risks and Mitigation Measures

Key Risks	Key Risks, Explanation of Risk Rating and Targeted Mitigation Measures in Design
Political risk and governance (Rating = Substantial)	Although Tunisia has stabilized politically, the post-revolution social and political context remains fragile, especially given that national elections are scheduled for the end of 2019. Civil service wages have increased alongside declining bureaucratic effectiveness. There are also risks of weak bureaucratic incentives for change, and resistance to the uptake of new GovTech reforms and new GovTech technologies. Mitigation measures include: capitalizing on the cross-political party support for the Digital Transformation agenda to maintain support for this agenda; ensuring high-level administrative buy-in in the design and implementation of the GovTech work; addressing incentives via the DLIs; building in a strong stream of work on change management and showing civil servants how the reforms can improve their work and job satisfaction; and, by default, the project design creates internal and external pressures for reform uptake and implementation (through greater transparency, improved monitoring of services and increased citizen engagement).
Macroeconomic risk (Rating = High)	The macroeconomic environment has deteriorated and remains fragile: fiscal deficits remain high and debt is above the 70 percent debt-to-GDP benchmark for emerging markets. Growth prospects are also low. Corrective macroeconomic and fiscal measures, including monetary policy tightening if inflation continues, and implementation of wage bill and pension reforms are needed. Mitigation measures, supported by the IMF's FEP program and the World Bank's DPL, are currently underway to address these risks and strengthen the macroeconomic environment. Mitigation measures such as efficiency gains in the services, plus targeting improvements, will lead to fiscal savings. Other development partners (EU, AfDB, EBRD, KfW and AFD) also provide technical and financial support to accelerate the implementation of structural reforms to boost growth and ensure macroeconomic stability.
Sector Strategies and Policies (Rating = Substantial)	There is a high alignment between government national and sectoral strategies and the operation. Risks include weak inter-sectoral coordination; weak coordination between National ICT strategy and sectoral strategies; and risks relating to whether the other sectoral projects – such as in the Education sector of the Social Protection sector, do not achieve their objectives. Mitigation includes: activities and DLIs to ensure national-sectoral coordination; close monitoring of progress and course corrections through the Barometer; ensuring strong dialogue by the Bank and other donors to ensure the operations in the different sectors are implemented and are implemented coherently (for instance, between PREFAT and GovTech, and between the SP TA and GovTech); strong mobilization of additional resources via other donors who are interested in contributing to selected investments (such as devices) in the Education and SP sectors (such as the Millennium Challenge Corporation or AfDB); strengthening the PMU and sectoral teams via recruitment of experts; implementing a strong program of change management to ensure coordination between the purchase and use of devices and the digital solutions proposed under Component 1; and, having a strong strategy at the level of the MSA and MoE for a coherent approach to GovTech.
Technical Design of Project or Program (Rating = Substantial)	The project requires strong technical capacities, and coordination of complex multi-sectoral interventions. Key mitigation: simplification of the operation to the extent possible with a focus on two sectors and four priority services; strong mechanisms for coordination and change management.
Institutional Capacity for	There are risks of weak horizontal and vertical coordination, limited capacity to implement the new GovTech solutions and the risk that ICT civil servants will out-represent service delivery-related civil



Key Risks	Key Risks, Explanation of Risk Rating and Targeted Mitigation Measures in Design
Implementation and Sustainability (Rating = Substantial)	servants. Mitigation includes: simplifying project design to the greatest extent possible; adopting clear, simple and transparent institutional arrangements; having a strong component on change management and collaborative leadership; consolidating procurement contracts and providing hand-holding on all relevant areas (see fiduciary sections); taking a gradual and phased approach without being overly ambitious; ensuring strong project design readiness; and, reducing the burden on the public administration by leveraging private sector inputs and activities (such as through expert support or contracting ICT as a service).
Fiduciary (Rating = Substantial)	FM is substantial due to the complex institutional arrangements and the lack of experience at the MTCEN in implementing an IPF with DLIs. Mitigation includes: see Annex. Procurement is a very substantial risk due to the risk of delays, especially delays associated with procuring and developing complex ICT-related contracts. Mitigation measures include: strong procurement training and support for the PMU; seek open source solutions whenever possible and implement procedures to avoid vendor and technology lock-in, which is a source of waste and inflexibility; and, focusing on software and infrastructure <i>as a service</i> rather than all development in-house or traditional Waterfall projects.
Other (Rating = Substantial)	This relates to “technological” risks. New technologies pose multiple risks, including: the pace of implementation of ICT projects in relation to the evolution of technology and its adoption by users. This can lead to duplication and fragmentation of investments. The adoption of new technologies can also create a risk of digital exclusion for those who do not have access to ICTs and training, and finally, there is also a risk in terms of data security and confidentiality, if the quality of new technologies and gov-tech solutions are not adequate. Key risk mitigation measures include: (a) ensuring a strong authentication system, and a strong role for the Data Protection Agency in implementation; (b) updating ICT strategies to ensure the optimization of technological investments and the “right” technological choices; (c) using DLIs to incentivize regulatory reform and institutional coordination.



VI.RESULTS FRAMEWORK

Results Framework

COUNTRY: Tunisia

Digital Transformation for User-Centric Public Services

Project Development Objectives(s)

The project development objective (PDO) is to improve equitable access to and the quality and accountability of selected Social Protection and Education services through a GovTech approach.

Access will be measured in terms of: (i) increase in functioning access points for the selected public services; (ii) increased usage of the selected public services. Gains in equitable access will be measured in terms of two dimensions: (i) improved Social Protection systems (which in themselves improve the ability of the GoT to identify and serve needy groups); (ii) access for targeted vulnerable groups: (a) low-income groups; (b) women in rural areas; (c) illiterates; and (d) disabled people.

Quality will be measured in terms of: (i) user satisfaction; and, (ii) time/efficiency gains in delivery.

Accountability will be measured in terms of: (i) increased availability of sector and service-related information; and, (ii) increased responsiveness of public service providers to user feedback.

A "GovTech" approach has two core elements: (i) putting the citizen at the centre of the reform process; and, (ii) combining public sector reform innovations, change management and digital technologies.



Project Development Objective Indicators

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Project Development Objective: Improve equitable access, quality and accountability of selected serv							
Increased access to the targeted Social Protection Services (Social Assistance and Social Security) (Number)		0.00	13,000.00	376,000.00	439,000.00	604,000.00	670,000.00
Increased access of “target vulnerable groups” to Digitized Access Points (Number)		0.00	0.00	6,000.00	10,800.00	15,600.00	20,700.00
of which women (Number)		0.00	0.00	4,200.00	7,560.00	10,920.00	14,490.00
of which illiterate (Number)		0.00	0.00	1,200.00	2,160.00	3,120.00	4,140.00
of which disabled (Number)		0.00	0.00	600.00	1,080.00	1,560.00	2,070.00
Increased user satisfaction on Cash Transfer Program, Online Enrollment and Digital Learning Management System (Percentage)		0.00			3.00	10.00	20.00
Published barometer reports on the flagship services (Social Protection and Education) and ministerial decisions taken based on report recommendations (Yes/No)		No	No	Yes	Yes	Yes	Yes



Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Component 1: User-Friendly Institutional and Digital Delivery Solutions							
New social assistance targeting system operationalized (Yes/No)		No	Yes	Yes	Yes	Yes	Yes
Density of social security contributions among the target population (Percentage)		0.00	0.00	1.00	2.00	4.00	5.00
Percentage reduction of documents needed to join social security (Percentage)		13.00	0.00	5.00	10.00	15.00	25.00
Number of persons with new social protection / universal health care cards (Number)		0.00	0.00	1,000,000.00	2,000,000.00	3,000,000.00	4,000,000.00
Primary and secondary students enrolled for the school year through the Education Management Platform (Percentage)		0.00	0.00	50.00	60.00	75.00	80.00
Number of parents who have an active account on the education management platform (Number)		0.00	0.00	15,000.00	17,000.00	20,000.00	25,000.00
Number of students with learning risks (including of drop-out) identified through the Education Management Platform (Number)		0.00	0.00	200.00	1,000.00	1,500.00	2,000.00
Development of online learning applications for		No	No	Yes	Yes	Yes	Yes



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
students (Yes/No)							
Number of transactions in Digitized Access Points in targeted geographical areas (Number)		0.00	0.00	36,000.00	43,200.00	62,400.00	82,800.00
Component 2: Public and Private Sector Capabilities for Speedier and Responsive Service Delivery							
Percentage of students with school identifier (Percentage)		0.00	0.00	20.00	40.00	60.00	90.00
Percentage of social assistance beneficiaries / applicants verified their social security (Percentage)		0.00	0.00	40.00	60.00	80.00	95.00
Number of interministerial data exchange services (Number)		0.00	0.00	2.00	3.00	4.00	6.00
Operationalization of the public service delivery barometer (Yes/No)		No	Yes	Yes	Yes	Yes	Yes
Civil servants (in Education, Social Protection, Digitized Access Points) who are trained on new GovTech methods (Number)		0.00	450.00	2,000.00	3,550.00	4,100.00	4,100.00
of which in Education (Number)		0.00	0.00	0.00	1,000.00	2,000.00	2,500.00
of Which PS (Number)		0.00	400.00	900.00	1,400.00		1,400.00
of which Digitized Access Points (Number)		0.00	50.00	100.00	150.00		200.00
Component 3: Stimulating Improved Indoor and Outdoor Connectivity in Education and Social Protection							
Schools with high-speed		0.00		700.00	1,200.00	1,800.00	2,700.00



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
broadband access meeting quality of service standards (QoS) (Number)							
SP local units with high-speed broadband meeting quality of service standards (QoS) (Number)		0.00	25.00	50.00	100.00	150.00	250.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Increased access to the targeted Social Protection Services (Social Assistance and Social Security)	<p>PDO1 relates to a new targeting/social security system so it starts from zero and increases year on year. it is focused, by design, on targeting only low-income groups via social protection targeting.</p> <p>* The beneficiaries of these two services belong to a vulnerable population of low-income people. Thus, with regard to social security, the target</p>	Bi-annual	MSA with CRES, CNSS	MSA with CRES, CNSS	PMU



	<p>population includes the self-employed, including the poor and vulnerable, who have very limited income and are currently not covered by any social security, including agricultural workers.</p> <p>* The annual target values result from the sum of the annual target values of 2 sub-indicators: i) number of households (applicants and beneficiaries) eligible for social assistance according to the new targeting process. After the introduction of the new process in the first year, the number of eligible households should be 600,000 by the end of the project. ii) Number of new social security affiliations among the target population. Every year, 13,000 new affiliations are registered among the target population. The project is expected to increase the annual number of new</p>				
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	<p>affiliations from 13,000 to 14,500 per year, reaching a new membership of 70,000 by the end of the project. Sub-indicators for the PDO1</p> <p>1- Number of households (applicants and beneficiaries) eligible for social assistance according to the new targeting process Y1) 0, Y2)350000,Y3)400000,Y4)550000, End)600000</p> <p>2-Number of new social security affiliations among the target population: Y1)13000,Y2)2600,Y3)39000 ,Y4)54000,End 70000</p>				
<p>Increased access of “target vulnerable groups” to Digitized Access Points</p>	<ul style="list-style-type: none"> • PDO2 relates to the new service centres – to be implemented from Y1 – so starts at zero.2 It is disaggregated by gender. It will measure rural women’s access to services via the digitized access points/service centres Target vulnerable groups, 	<p>Annual</p>	<p>Ministry of Education CNTE, MCSPAPP (DGRPA)</p>	<p>Ministry of Education CNTE, MCSPAPP (DGRPA)</p>	<p>PMU</p>



	<p>in addition to low-income groups, are: women in rural areas; illiterates; and disabled groups.</p> <p>The annual target values are based on the number of transactions made by vulnerable populations accessing digitized access points, measured as such: $T \cdot 12 \cdot Dp \cdot Pop$</p> <ul style="list-style-type: none"> • T: The average number of monthly transactions in digitized access point is estimated at 100. • Dp: This refers to the number of operational digitized access points: 20 (Y2) 36 (Y3) 52 (Y4) 69 (Y5) • Pop: The approximate share of transactions made by the target vulnerable groups : 25% 				
of which women					
of which illiterate					
of which disabled					



<p>Increased user satisfaction on Cash Transfer Program, Online Enrollment and Digital Learning Management System</p>	<ul style="list-style-type: none">• PDO 3 relates to a measure of user satisfaction. The baseline of satisfaction on the flagship services will be design and established by the end of Y1. 3. It will also disaggregate user satisfaction by gender (and this gender disaggregation will also be built into the Barometer from Component 2). Satisfaction could be measured on the 5-point scale from “Very Unsatisfied” to “Very Satisfied.” The parameters will be clearly defined to ensure simple measurement and attribution to the project investments (for example, very focused questions such as: do you find the resources you need on line?). The GoT is aware of the strengths and limitations of user satisfaction surveys. It is also aware that this is one of many metrics. It is also aware that action needs to	<p>Annual</p>	<p>MoE, MSA, Barometer</p>	<p>MoE, MSA, Barometer</p>	<p>PMU</p>
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	be taken to improve user satisfaction.				
Published barometer reports on the flagship services (Social Protection and Education) and ministerial decisions taken based on report recommendations	<ul style="list-style-type: none"> • PDO4: the barometer is not yet established. The result will be considered to be achieved, that is “yes”, when a minimum of 50% of the recommendations related to Education and to Social Protection have been acted upon. The Barometer report will be designed in the first year (Y1). It will be published for the first in the second year (Y2), including recommendations that are expected to be acted on by ministerial decisions pertaining to specific indicator results and/or other recommendations. Starting from the third year, the report will also publish ministerial decisions that have been effectively taken based on recommendation from prior year reports. Ministries will benefit from information on 	Annual	MCSPAPP (UAE) with MoE/MSA, E people	MCSPAPP (UAE) with MoE/MSA, E people	PMU



	citizen feedback and complaints that are collected through existing systems, such as the complaints mechanism and e-People.				
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Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
New social assistance targeting system operationalized	This indicator will measure the delivery of social assistance transfers and benefits	Annual	MSA, CRES, INS Survey	MSA, CRES, INS Survey	PMU
Density of social security contributions among the target population	This indicator will be defined/measured by either the share of the population with total social coverage (4 quarters per year) or the average number of quarters contributed. For example, in 2018, the share of non-salaried workers (TNS) who contributed all 4 semesters was 35% among the non-agricultural non-salaried workers and 21% among the agricultural non-salaried workers.	Annual	CNSS	CNSS	PMU



Percentage reduction of documents needed to join social security	These include but are not limited to (will be further refined during the As-is-to-Be review) : (1) request for affiliation (CNSS hardcopy) (2) copy of the national identity card of the employer (3) copy of the legal representative of the company (4) copy of the residence card for foreigners (5) an original excerpt from the commercial register (6) a certified copy of the tax identification card (7) certified copy of the authorization to exercise the activity (8) attestation of exercise of the activity (9) certificate of ownership of the agricultural land (10) certified copy of the duly registered rental agreement (11) certified copy of the work leave (12) a birth certificate that is less than 3 months old (13) a staff statement. At the end of the project,	Annual	MSA, CNSS, MoF	MSA, CNSS, MoF	PMU
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	the 25% reduction means that a quarter of the documents needed at the beginning of the project will no longer be required to join the social security system.				
Number of persons with new social protection / universal health care cards		Annual	CNAM with MAS	CNAM with MAS	PMU
Primary and secondary students enrolled for the school year through the Education Management Platform	This includes assisted enrollment through Digitized Access Points.	Annual	Ministry of Education	Ministry of Education	PMU
Number of parents who have an active account on the education management platform	Active is measured by a specific number of times (at least 3 times) that a parent has logged to the platform during an academic year.	Annual	Ministry of Education	Ministry of Education	PMU
Number of students with learning risks (including of drop-out) identified through the Education Management Platform	This covers largely secondary and college level. The system is designed to detect students at risk and trigger the response mechanism	Annual	Ministry of Education	Ministry of Education	PMU
Development of online learning applications for students	this indicator measure whether student online learning applications were developed	Annual	Ministry of Education	Ministry of Education	PMU
Number of transactions in Digitized	Target Digitized Access	Annual	MCSPAPP	MCSPAPP	



<p>Access Points in targeted geographical areas</p>	<p>Points refers to the new stationary points established in the 55 districts as well as the mobile points; including in the most under-served areas. The annual target values are measured as such: $T \times 12 \times Dp$</p> <ul style="list-style-type: none"> T: The average number of monthly transactions in digitized access point is estimated at 100 (Y2), 100 (Y3), 100 (Y4), 100 (Y5) Dp: This refers to the number of operational digitized access points: 20 (Y2) 36 (Y3) 52 (Y4) 69 (Y5) 		(DGRPA) with the other Ministries	(DGRPA) with the other Ministries	
<p>Percentage of students with school identifier</p>	<p>In 2018, the number of primary students was: 1,100,790, and the number of secondary was: 894, 305. Given that the student numbers fluctuate, the target is based on percentages.</p>	Annual	MoE	MoE	PMU
<p>Percentage of social assistance beneficiaries / applicants verified their social security</p>	<p>This indicator measures the percentage of verified social assistance applicant</p>	Annual	MSA, CNSS and CNRPS	MSA, CNSS and CNRPS	PMU



Number of interministerial data exchange services	Examples for the education sector: verification of the civil status of the parent/student, verification of the address of the parent/student, school situation of a student; etc. Examples for the social sector: verification of the civil status of a beneficiary, verification of the family cluster, tax situation of a recipient of social assistance; etc.	Annual	MTCEN (MoE and MSA)	MTCEN (MoE and MSA)	PMU
Operationalization of the public service delivery barometer	This indicator measure whether public service delivery barometer was operationalized	Annual	MCSPAPP MoE, MSA	MCSPAPP MoE, MSA	PMU
Civil servants (in Education, Social Protection, Digitized Access Points) who are trained on new GovTech methods	For example, teachers and MoE staff will be trained on new education platform and applications, and social workers and MAS staff will be trained new process of evaluating beneficiaries using improved targeting approach.	Annual	MoE, MSA, CNSS, CNAM, CRES, MCSPAPP	MoE, MSA, CNSS, CNAM, CRES, MCSPAPP	PMU
of which in Education		Annual	ME, MAS, Funds, MFP	ME, MAS, Funds, MFP	PMU



of Which PS		Annual	ME, MAS, Funds, MFP	ME, MAS, Funds, MFP	PMU
of which Digitized Access Points		Annual	ME, MAS, Funds, MFP	ME, MAS, Funds, MFP	PMU
Schools with high-speed broadband access meeting quality of service standards (QoS)	This is measuring Connectivity as a Service (Indoor and outdoor) as well as QoS (high-speed broadband access and bandwidth for schools) with well-defined Service Level Agreement (SLA).	Annual	Ministry of Education with MTCEN	Ministry of Education with MTCEN	PMU
SP local units with high-speed broadband meeting quality of service standards (QoS)	This is measuring Connectivity as a Service (Indoor and outdoor) as well as QoS (high-speed broadband access and bandwidth for SP local units) with well-defined SLA.	Annual	MSA with MTCEN	MSA with MTCEN	PMU

ANNEX 1: DLIs, DLRs and Verification Protocol

DLI (original/ no change, revised, new, marked for deletion)	Lead agency	Year 1	Year 2	Year 3	Year 4	Year 5
DLI 1. Adopting Key Govtech and Digital Economy Regulatory Reforms	MTCEN (DLR 1.1; DLR 1.3) MoE and MSA (DLR 1.2; DLR 1.4; DLR 1.5)	DLR 1.1.a An official document has been signed at ministerial level authorizing the exchange of data between MAS and another sector DLR 1.1.b An official document has been signed at ministerial level authorizing the exchange of data between MoE and another sector	DLR 1.2.The action plan included in the As-is-to-Be study(ies) on the flagship services is approved by CoM	DLR 1.3a. Digital Law approved by CoM and submitted to parliament DLR 1.3b Digitalization Development Agency has been created	DLR 1.4. 60% of actions identified in the action plan mentioned in DLR 1.2 have been implemented	DLR 1.5. Cumulative 80% actions identified in the action plan mentioned in DLR 1.2 have been implemented
Allocated amount	US\$6 million	US\$1 million	US\$2 million	US\$1 million	US\$1 million	US\$1 million
Status of Achievement/ Disbursement						
DLI 2. Delivery Responsiveness and Access for Under-Served Groups	Ministry of Civil Service (DLI 2.1; 2.2; 2.5), MSA and Education (DLI 2.3; 2.4)	DLR 2.1a. Government decree on Open data is approved by CoM DLR 2.1b. Government decree on digitized access points	DLR 2.2. Twenty (20) digitized access points are fully operational in selected areas	DLR 2.3. MSA and MoE have: (a) published their respective dataset inventories, and (b) published 40% of above mentioned datasets in accordance with open data	DLR 2.4 MSA and MoE have: (a) published their respective dataset inventories, and (b) published 60% of above mentioned datasets in accordance	DLR 2.5. Sixty-nine (69) digitized access points are fully operational in selected areas

		is approved by CoM		standards	with open data standards	
Allocated amount	US\$6 million	US\$1 million	US\$1 million	US\$2 million	US\$1 million	US\$1 million
Status of Achievement/ Disbursement						
DLI 3. Optimizing Connectivity	MTCEN	DLR 3.1. Adoption by CoM and publication of National High-Speed Broadband Plan, including a detailed action plan on connectivity and digital needs of public schools. ⁵⁰	DLR 3.2. Extend network coverage to cover fifty-seven (57) public schools in areas without indoor/outdoor connectivity	DLR 3.3. Mobilize additional public resources of 2,676,000 EUR to meet the connectivity and digital needs of public schools (other than the public schools supported under Part 3 of the Project) in areas with no indoor/outdoor connectivity	DLR 3.4. Mobilize additional public resources of 3,568,000 EUR to meet the connectivity and digital needs of public schools (other than the public schools supported under Part 3 of the Project) in areas with no indoor/outdoor connectivity	DLR 3.5. Mobilize additional public resources of 4,460,000 EUR to meet the connectivity and digital needs of public schools (other than the public schools supported under Part 3 of the Project) in areas with no indoor/outdoor connectivity
Allocated amount	US\$8 million	US\$2 million	US\$2 million	US\$2 million	US\$1 million	US\$1 million
Status of Achievement/ Disbursement						

⁵⁰ This will include a detailed action plan on connectivity and digital needs of schools. This will cover the following aspects: detailed feasibility study and dynamic map of school connectivity status, needs assessment, define Service Level Agreements (SLA) standards (including bandwidth provision per student or per site, opportunities to use schools as points of presence and monitoring and payment conditions), technical specifications and procurement documentation, multi-phased investment action plan (prioritization, lots, regions, appropriate connectivity solution).

	DLI	Definition Description of achievements	Scalability of Disbursements (yes/no)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification entity	Procedure
1	DLI 1. Adopting Key Govtech and Digital Economy Regulatory Reforms	DLR 1.1: In order to be effective, the document should be approved at an inter-ministerial level. In sum, it should allow all government administrations, particularly those working across and within the education and social affairs sectors, to open their data and information systems to other administrations. Each administration may therefore request the opening/access of information and data from another administration in view of digitizing services for government or for citizens and businesses. Any data exchanges involving citizens should pass through the national register of the unique citizen identifier.	No	MTCEN/MoE/MSA	GCPS	The GCPS should verify that an official document was approved at an inter-ministerial level and published on a government website.
		DLR 1.2: The project will support an “As-is-to-Be” review (or several) of administrative processes related to the four flagship services that will include an action plan aiming to simplify, automate, and optimize relevant processes using human centered design and journey mapping approach. The action plan will cover organizational, technical and regulatory aspects and should include actionable and quantifiable items such as the adoption of simplified protocols,	Yes	MoE and MSA MTCEN	GCPS	The GCPS will receive official confirmation that the action plan included in the study (or studies) were taken up on the agenda of the CoM and approved by the meeting (e.g. minutes of the CoM meeting). The disbursement amount will be determined by the number of flagship services included in the “As-is-to-Be” study(ies) which recommendations have been approved by the CoM. For example, if a study covering only one flagship service is approved by CoM, then the client will receive 25%

	<p>reduction of the number of supporting documents, reduction of the time required for each process, etc. The four flagship services are: (i) the social assistance system (cash and benefit transfers); (ii) the social security program (pensions and health insurance); (iii) the education management platform (including enrollment, student monitoring and drop-out detection); and, (iv) the learning management platform.</p> <p>The recommendations should be adopted at the CoM.</p>				<p>of the allocated disbursement amount. The amount to be disbursed against the DLR can be scaled with respect to the number of flagship services covered in the study or studies approved by CoM, out of the four services.</p>
	<p>DLR 1.3a. It is expected that the CoM approves the draft digital law and submits it to parliament. :</p> <p>The new digital law (to be approved) will replace the existing telecommunication law to provide a new modern regulatory framework based on global developments in technology and telecommunication. It will be an important lever to stimulate the digitization of the government and the growth of the digital economy in Tunisia.</p> <p>DLR1.3b: The current Delivery Unit, housed at the MTCEN, is expected to be transformed into an official public agency 'Digitalization Development Agency' that will have a lead responsibility in conceiving, piloting and monitoring the implementation of national digital projects.</p>	Yes	MTCEN	GCPS	<p>The GCPS will verify the official adoption of the digital law by the CoM and subsequently, its submission to Parliament.</p> <p>The GCPS will verify and confirm the creation of the Digitalization Development Agency which will be formalized through a government decree or other legal instrument approved by the government.</p> <p>If only one of the two DLRs is achieved, then the client will receive 50% of the allocated amount. In other words, the amount to be disbursed against the DLR can be scaled with respect to the number of adopted texts by CoM compared with the total number targeted in the DLR.</p>
	<p>DLR 1.4-1.5: This series of DLRs is a continuation of DLR 1.2. It looks at the progress and effectiveness in the implementation of the recommendations outlined in the "As-is-to-Be"</p>	Yes	MoE and MSA	GCPS	<p>The GCPS is expected to collect and validate implementation progress reports produced by the ministries in charge of delivering the flagship services. The GCPS should measure the</p>

		review of the four flagship services. The recommendations are actionable activities that cover regulatory, legal, and technical aspects.				implementation rate of the recommendations outlined in the draft or final/approved “As-is-to-Be” review of the four flagship services. The amount to be disbursed against the DLRs can be scaled with respect to the number of implemented recommendations compared with the total number of outlined recommendations in the “As-is-to-Be” review.
	DLI 2. Delivery Responsiveness and Access for Under-Served Groups	DLR 2.1: It is expected that the CoM approves the draft decree establishing the organizational and implementation arrangements of Open data in Tunisia in addition to another text on digitized access points: - The open data decree will cover organizational and technical arrangements needed to be implemented to improve the adoption of open data principles and standards in the public sector - The decree on digitized access points will institutionalize a new management and organizational model for digitized access points, as part of the broader government initiative on citizen service centers	Yes	Ministry of Civil Service, particularly the Electronic Administration Unit (EAU) and Administrative Reforms General Directorate	GCPS	The GCPS will verify the official adoption and publication of these texts with respect to current in-place legal proceedings. If only one of the two DLRs is achieved, then the client will receive 50% of the allocated amount. In other words, the amount to be disbursed against the DLR can be scaled with respect to the number of adopted texts by CoM compared with the total number targeted in the DLR.
		DLR 2.2 and DLR 2.5: The government’s action plan rests on deploying at least 69 digitized access points to provide human-assisted access including but not limited to the following services: (a) social assistance application; (b) social security enrollment and updates; (c) health insurance enrolment; (d) assisted school enrollment. Access to other administrative services, which can be delivered	Yes	Ministry of Civil Service, particularly the Administrative Reforms General Directorate (DGRPA)	GCPS	The DGRPA and/or the institutional body in charge of digitized access points will provide a detailed report on the activities and implementation progress of digitized access points. This report should enable the GCPS to identify the number of digitized access points that are fully operational. The GCPS will audit the report, based on a representative sampling, to verify that the information provided in the report on the

	<p>through such access points will also increase (where feasible and appropriate).</p> <p>For these access point to be fully operational the government must ensure that capital investments covered by the project such as costs of rehabilitation and IT equipment, is complemented with other key measures such as ensure adequate staffing (number and competencies), new business models and financing arrangements to cover recurrent costs, and others to be included in the draft decree to be adopted by CoM.</p>				<p>operational status of access points is correct and in line with good practices and standards and meet performance metrics set by the responsible body. The GCPS evaluation will cover the following aspects, including but not limited to: functioning pf alternative channels to access digital services such as assisted access; queue management systems, maintenance of IT equipment, service quality measured through an institutional survey.)</p> <p>The amount to be disbursed against the DLRs can be scaled with respect to the number of established operational access points compared with total number targeted in the DLRs.</p>
	<p>DLR 2.3 and 2.4: According to the Open Data decree expected under the DLR 2.1, the MSA and MoEare expected to publish on their webistes:</p> <ul style="list-style-type: none"> - In Y3 their respective data inventories (structred accroding to a model defined under the decree in DLR 2.1a) which which represents the list of public data produced or collected in their service delivery and housed in their different information systems and databases; - In Y3, 40% of their datasets listed and published in their respective data inventories according to Open data decree provision of DLR 2.1a; - In Y4, 60% of their datasets listed and published in their respective data inventories according to Open data decree provision of DLR 2.1a. <p>The inventory model will include different sections describing the attributes of each</p>	Yes	MoE and MSA	GCPS, with support from EAU	<p>The Ministries will provide a detailed report to CGSP about indicators progress with links to their respective inventories of data, and the published datasets on their websites. The GCPS will verify the accuracy of this information and assess whether standards and specifications in the decree have been duly followed.</p>

		dataset; for example, data sources, responsible agencies, periodicity, collection and updating procedures, and classification of data (personal, or publishable), etc. Data inventories must be updated annually. They will constitute a catalog of public datasets that will enable agencies to organize and prioritize their publication and progressively make them available to citizens and the general public (the published data will be a subset of the datasets that will have been referenced in the inventory).				
3	DLI 3. Optimizing Connectivity	<p>DLR 3.1: The National Broadband Plan will provide an updated assessment of the current broadband penetration and speed by governorate and provide policy options that accelerate Ultra-Fast Broadband (UFB) deployment in appropriate geographical locations and, strengthen the involvement of the private sector and the level of competition in the sector for broadband. It will:</p> <ul style="list-style-type: none"> - develop the main technology, regulatory and financial elements needed for the Government of Tunisia to update its UFB policy that will foster private sector participation to accelerate the roll-out of UFB. - include a detailed action plan on connectivity and digital needs of schools, to include: detailed feasibility study and dynamic map of school connectivity status, needs assessment, define Service Level Agreements (SLA) standards (including bandwidth provision per student or per site, opportunities to use schools as points of presence and monitoring and payment 	No	MTCEN	GCPS	The National Plan, including detailed action plan on connectivity and digital needs of schools will be discussed and endorsed by CoM and subsequently published on the website of the MTCEN. The GCPS will receive official confirmation that the documents were taken up on the agenda of the CoM and endorsed (e.g. minutes of the CoM meeting). The documents will be published on the MTCEN's official website - the URL link will be communicated to the GCPS.

		conditions), technical specifications and procurement documentation, multi-phased investment action plan (prioritization, lots, regions, appropriate connectivity solution).				
		DLR 3.2: The GoT will extend network coverage to 57 schools in white areas with [3G/]4G technology, or appropriate broadband technology (including Fixed Wireless Access and Broadband via Satellite).	Yes	MTCEN, MoE	GCPS	<p>The GCPS will verify through data provided by the Instance National des Telecommunication as well as by the Ministry of Education that network coverage was extended to these 57 schools.</p> <p>The amount to be disbursed against the DLR can be scaled with respect to number of schools effectively reached compared with total targeted number in the DLR.</p>
		<p>DLR 3.3 -3.5: The GoT is expected to mobilize additional public resources to meet the connectivity and digital needs of public schools (other than the public schools supported under Part 3 of the Project) in areas with no or weak indoor/outdoor connectivity</p> <p>Given that the project represents a partial response to the overall connectivity needs expressed by the government, this series of DLRs intends to incentivize the government to leverage additional resources to meet overall needs.</p>	Yes	MoF, MTCEN, MoE	GCPS	<p>The GCPS will use publicly available and/or official governments documents (e.g. national budget law, budget performance results reports, annual report of ITC Development Fund) to verify total amount of public resources effectively mobilized to meet the amount targeted in the DLRs. The mobilized amounts must be allocated for the purposes of meeting the connectivity and digital needs of schools (e.g. investments in indoor/outdoor connectivity, purchase of bandwidth for schools, etc.).</p> <p>The amount to be disbursed against the DLR can be scaled with respect to the amount effectively mobilized compared with total amount targeted in each DLR.</p>

ANNEX 2: Financial Management and Procurement Assessment Report

111. **Financial Management and Procurement assessments have been carried out** in accordance with the World Bank Policy on Investment Project Financing to evaluate the adequacy of financial management arrangements for the implementation of the project.
112. **Financial Management, Disbursements and Procurement.** The financial management responsibilities for the project will remain with the Delivery Unit established to implement the project. Though the MTCEN possesses the required capacity for implementing donor-funded projects, technical assistance will be required to ensure that it is adequately staffed and that it has appropriate controls and procedures in place. The financial management arrangements for the project, including accounting and reporting arrangements, internal control procedures, planning and budgeting, external audits, funds flow, organization and staffing arrangements, are assessed as satisfactory. Nevertheless, risks are rated as substantial as outlined below:
- Risk 1: Complex institutional arrangements involving four sectoral ministries
 - Mitigation Measure #1: Developing an operational manual of fiduciary procedures
 - Mitigation Measure #2: Sharing fiduciary responsibilities between the DU and sectoral ministries
 - Mitigation Measure #3: Payments processed by the DU and executed by the BCT
 - Risk 2: MTCEN's first experience in with DLIs; hence risk meeting the indicators, identifying eligible expenditures, and sectoral disbursements risks
 - Mitigation Measure #1: Use of the *Programme National d'Assistance aux Familles Nécessiteuses* – PNAFN program to justify eligible expenditures/disbursements: 145 million USD in annual transfers
 - Mitigation Measure #2: Opening a dedicated account for the project for disbursements
 - Mitigation Measure #3: Need to budget IT equipment in time based on credible justification
113. **As a result of the above-mentioned constraints, it is required that:** (i) the existing DU will be responsible for the day to day management of funds and accounting for the project; and (ii) an agreement is reached with the Bank on the format of the consolidated Interim Financial Reports (IFR), the IFR under the EEP and the audit terms of reference and outlined in the operations manual. To strengthen DU capacity, additional measures are needed including: (i) the recruitment of an additional accountant to coordinate all FM aspects of the project including the relationship with the executing agents and the timely production and monitoring of consolidated FM reports; and (ii) the elaboration of the Procedural Manual including FM and disbursement arrangements. In matters related to audits: (i) General Financial Control (*Contrôle Général des Finances* – CGF), which is seen as acceptable to Bank standards, will audit the project financial statements including the designated account for the project; and (ii) the General Control of Public Service (*Contrôle Général des Services Publics* – CGSP) which capacity is found adequate will act as an Independent Verification Agent of the Disbursement Linked Indicators.

Financial Management

114. **Country public financial management analysis.** The last Public Expenditure and Financial Accountability assessment (PEFA 2015) concluded that the legal and administrative framework for public financial management offers an adequate level of assurance regarding reliability of information, predictability and control in budget planning and execution and a strong control environment. However, the report also identified that there is still room for improvement particularly with regards to budget comprehensiveness, transparency and accountability. Ongoing technical assistance has been mobilized by the donors (particularly the European Union and the World Bank) to address the remaining shortcomings. The project will make wide use of the Tunisian public financial management country systems particularly, the procedures for budget preparation, execution, internal control⁵¹ and monitoring; the use of the national budget system ADEB; the use of the treasury single account system; and ex-post review controls such audits performed by government independent entities.
115. **Organizational arrangements and staffing.** MTCEN is endowed with a Delivery Unit(DU) created to manage the AfDB project. This DU will also handle the project's activities. The DU comprises a coordinator, a project management officer, a financial management specialist and an accountant. Considering the number of beneficiaries' line ministries (4), a fiduciary focal point will be appointed in each line ministry. Additional responsibilities of the financial management team within the DU will include: a) project transaction recording and accounting; b) review of requests for payments and related supporting documentation submitted by technical implementers to the DU for payment processing; c) preparation of compiled project financial information including annual project financial statements and bi-annual interim unaudited financial reports (IUFRR); d) preparation of "*dossier des paiements*" to be addressed to the Central Bank of Tunisia for payment of eligible expenditures from the Designated Account (DA); e) perform periodic reconciliation of project DA account; f) provide advice to other technical implementers entities on FM and disbursement related aspects; and g) maintenance of adequate files of the Project.
116. **Annual work program.** In parallel with the preparation of national budget law, the DU will collect, prepare and submit to the Bank, a proposed annual work program and budget for the following Fiscal Year, giving details of: (a) a time table of programs and activities scheduled for implementation during that next following Fiscal Year; and (b) the estimated cost of each such program or activity, along with the budget line item and source of funding corresponding to each program or no later. Lack of synchronization with the national budget law preparation is a key risk that could affect the planning process of the project. For example, delays in submitting the project's activities in the budget law could lead to the absence or underestimation of the project costs in the budget law, specifically for IT equipment. The programming and budgeting of the activities based on credible justification will be critical. The task team will support the DU and line ministries to mitigate this risk.
117. **Budgeting.** The annual budget law approved by the parliament will include the project work program validated by the World Bank. The identification of the EEP is the first major risk that could affect the project's entire budgeting cycle and the DLIs. Indeed, the selection of the expenditures substantiated by activities insufficiently mature could translate into low budget execution and in turn affect the DLIs. To mitigate this risk, a thorough review of the budget lines has been carried to identify

⁵¹ The Tunisian system is based on the principle, typical of francophone PFM systems, of segregating the responsibilities and separating the roles between the payment authorizer and public accountant

mature and pertinent activities in line with the project’s development objectives.

118. **Eligible Expenditures Program.** The expenditures associated with the National Assistance Program for In-Need Families (*Programme National d’Assistance aux Familles Nécessiteuses – PNAFN*) meet the fiduciary criteria for inclusion into the project’s EEP and are eligible for reimbursement by the World Bank under the project. This program consists of (i) an unconditional cash transfer and social assistance through a monthly financial assistance; (ii) an allocation of free health care cards, and (iii) an additional cash transfer for households with children of school age. The targeted groups⁵² are (i) the families deprived of material support; (ii) the household heads unable to exercise a professional activity/trade; and (iii) the households with an adjusted annual income not exceeding TND 585 (US\$194). The monthly amount transferred is about TND 150 (US\$ 50) through the National Postal Office bureaus (*La Poste Tunisienne*). The program is being supported by a World Bank funded project with the view to improve its impact. Areas for improvement include the targeting and the identification of the beneficiaries. The financial execution of the Program is exemplary. The associated expenditures do not include any procurement related activities.

Line Ministry	Object Code and Description	Detailed Object Code and Description	Amount 2018 (in USD million)
Ministry of Social Affairs	3336 Public Intervention Expenses	033363100027 National Assistance Program for In-Need Families	146.7

119. **Information management system.** The system used to register budget appropriations is ADEB (*Système d’aide à la décision budgétaire*). This is the national computerized budget system that allows for the proper record of commitments and payments, and for adequate budget monitoring and control as it offers a sound control environment and an adequate segregation of duties. The ADEB system has an official budgetary classification which is the basis for the preparation of consolidated budget execution information of all government expenses (budget). Besides, for all the expenditures financed under the Loan, the Delivery Unit will make use of the system SIADE (*Système informatisé d’aide à la dette extérieure*) to maintain separate accounts related to external funding management. Information from both, ADEB and SIADE on project are processed to elaborate the project financial statement. The project might use the Monitoring, Evaluation and Implementation of Public Projects system (*Système de Suivi et d’Evaluation de l’Exécution des Projets Publics*) developed by the National Centre for Information System (Centre National d’Informatique, CNI) which is being gradually deployed. The system has a financial module which allows to produce specific reports. The system can be installed at both, the central and regional levels.

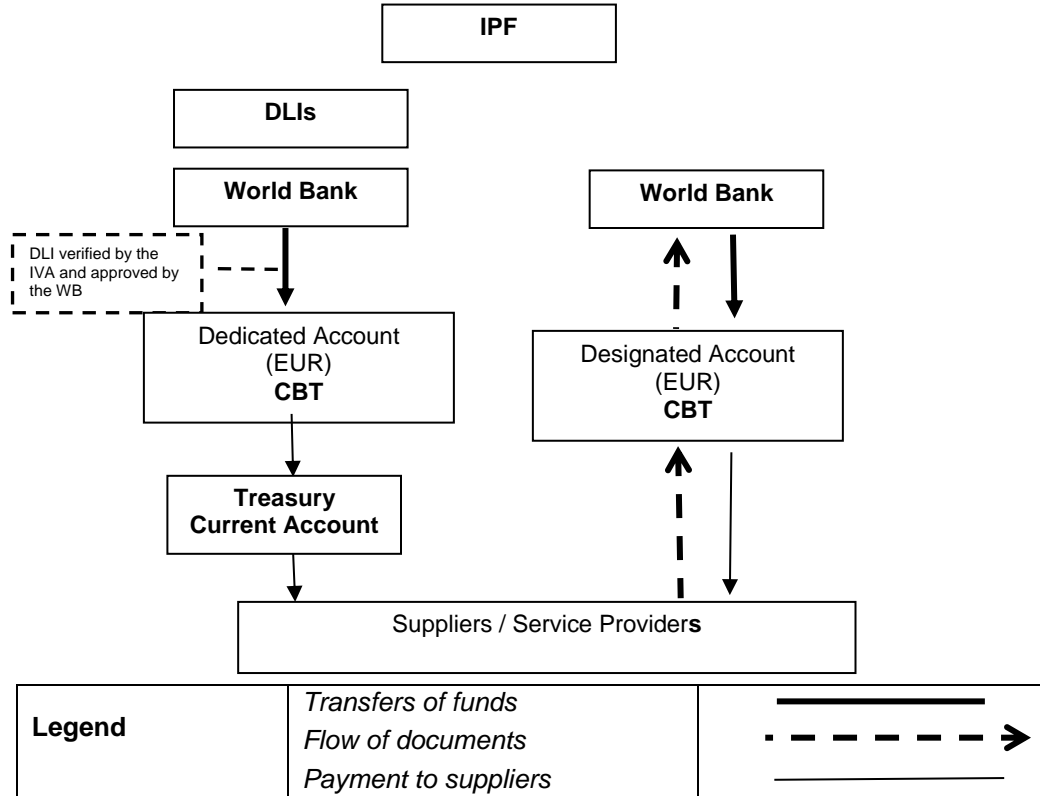
120. **Accounting.** In Tunisia, all financial and accounting operations of the Government are carried out, controlled and accounted for according to the public sector accounting standards laid down in the Public Accounting Code (*Code de la Comptabilité Publique*) which is on cash basis. The project accounting will use public sector accounting standards stated in the Public Accounting Code. The project financial statements will be prepared based on information generated from ADEB and SIADE.

121. **Internal Controls.** The project will use the existing internal control system in place within the MTCEN (which is being enhanced through the development of a manual of procedures) and the

⁵² About 304,000 households

beneficiaries' line ministries. This will be complemented by the DU's manual of procedures which includes detailed additional procedures at the decentralized level. This manual will include the Results Based Financing approach. The MoF internal control system is deemed satisfactory by the Bank. This system encompasses the following: i) appropriate guidelines for annual budget preparation and implementation, ii) clear segregation of duties between the payment authorizers and the public accountant, iii) ex ante control of the financial controller, iv) regular reconciliations of bank accounts that provide reasonable assurance of the accuracy of financial records, v) acceptable procedures for documentation and record retention, and vi) verification of the eligibility of the expenditure by the Delivery Unit before submission of payment order to the Central Bank as per requirements established in the project Loan Agreement and Disbursement and Financial Information Letter.

122. **Funds Flow.** The project's funds will be disbursed in a designated account to be opened at the Central Bank on behalf of the project. Further advances to the project's designated account will be made upon reporting on the use of a prior advance. The DU (through the CBT) will report on the use of loan proceeds advanced to the project's designated account in accordance with the Disbursement and Financial Information Letter. Disbursements for the DLIs will be transferred through a dedicated account opened at the Central Bank of Tunisia into a treasury current account. The project's funds will be disbursed into a designated account on behalf of the project opened at the Central Bank. Disbursements for the DLIs will be transferred from the dedicated account into the above-mentioned treasury account and will be used to finance activities undertaken by MTCEN and the other concerned ministries. Total project's eligible expenditure will be summarized in the Statement of Expenditures (SOE) prepared by CBT and will be submitted to the Bank for processing. If the Bank determines that an ineligible expenditure has been financed by loan proceeds, the Bank may require to whether refund the amount, or in exceptional circumstances, as provided in the Bank disbursement policies, provide substitute documentation. The description of the funds flow is presented below:



123. **Disbursement Linked Indicators and Related Reporting Requirements.** Disbursements on the DLIs will follow a results-based financing approach by establishing a set of DLIs that would trigger disbursements for an overall amount of US\$20 million. Reimbursement will be the disbursement method for the DLIs. The reimbursement will be made directly into the dedicated account opened at the Central Bank on behalf of the project then transferred into the treasury account. Once the MTCEN and other beneficiaries' line ministries have met the agreed DLI targets and the World Bank has approved them, the funds disbursed under this modality will be documented against the presentation of the EEPs for an amount which will be the lesser between the amount allocated for the achievement of the DLRs and the incurred EEPs at the time of the verification of the DLIs.
124. **DLI verification.** Given the number of beneficiaries (MTCEN and line ministries) involved in the DLI mechanism, the best placed independent verification agent is the General Control of Public Services (*Contrôle General des Services Publics*). The assessment of this entity confirmed the adequacy of its capacity to carry out the planned task. The entity will issue a separate annual opinion on the accuracy and the fair view of the information presented by the DU on the EEP and DLI. This separate certificate should be sent to the Bank upon completion of the verification.
125. **Financial reporting.** The project will primarily use ADEB (budgeting) and SIADE (treasury) to gather, record and summarize project's financial transactions as well as elaborate the financial statements. The format of the Interim Financial Reporting (IFR) to be prepared 45 days after the end of the calendar semester and the Financial Statements will be agreed during the negotiations and reflected in the Project Operational Manual. Each IFRs will comprise the following: (i) report on the sources and use of funds cumulative (project-to-date; year-to-date) and for the period, showing budgeted amounts versus actual expenditures, including a variance analysis; (ii) forecast of sources and uses of funds; and (iii) progress statement on each EEP (budgeted amounts versus actual expenditures) and schedule of DLIs analysis.
126. **Internal audit.** The Ministerial Inspectorate of MTCEN will act as internal audit unit for the project. To this end a technical assistance included in the project will be elaborated in collaboration with Ministry of Finance as part of the implementation of the broader PFM reform agenda. This technical assistance will include the development of a risk map and the deployment of the risk-based audit in the line ministry.
127. **External Audit.** The General Financial Control, an entity acceptable to the bank, will audit the project financial statements including the designated account. The financial statements will be prepared in accordance with acceptable accounting standards and audited in accordance with acceptable international public sector auditing standards. To that end the DU, will prepare the terms of reference (TOR) for the audit work and will submit it to the Bank for its acceptance. The TORs will encompass both the audit of the financial transactions and an assessment of the internal control and should cover all the operations implemented under the project as well as all sources of financing. As a minimum requirement, the auditor will produce (a) an annual audit report including his/her opinion on the project annual financial statements and (b) a management letter on internal controls. The MTCEN through the DU should submit the audit report to the Bank within six months after the end of the fiscal year audited.

Procurement

128. **Institutional arrangements.** Project's procurement will be carried out by the Delivery Unit. In accordance with the provisions of the decree # 2012-1997 of September 11, 2012, fixing the attributions of the MTCEN, MTCEN, proposes the general policy in the field of information and communication technologies and ensures its implementation in order to consolidate the role of the sector in the economic and social development. MTCEN is implementing Digital Tunisia 2020 which is a five-year strategy targeting ICT technologies to increase the number of jobs and export earnings within the ICT sector. This strategy aims to make ICT an important lever for socio-economic development. In addition to the Digital Tunisia 2020 strategy, which focuses on the entire sector, the Smart Tunisia program is intended for companies in the offshoring sector.
129. **Procurement arrangements for the project.** MTCEN will follow the Procurement for the project will be carried out in accordance with World Bank Bank's Procurement Regulations for IPF Borrowers (Regulations), July 2016 edition, revised in November 2017, and August 2018, and the provisions stipulated in the Legal Agreement. The project will be subject to the Bank's Anticorruption Guidelines ('Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants'), dated October 15, 2006, and revised in January 2011 and July 2016.
130. **Compliance of IPF with DLI activities with procurement rules:** While most of the identified IPF with DLI activities are non-procurable, the Bank's procurement rules apply to all contracts financed wholly or in part by the Bank for procurable items. When procurable items are organized as a budget line, the Bank's rules apply to the entire budget line, not merely that part financed by the Bank. For contracts below international market thresholds, the Bank may agree to use Borrower's procedures; it may also, in exceptional cases, agree to the use of other procurement arrangements, including the Borrower's, for international bidding, provided they are consistent with Bank core procurement principles and meet other policy requirements, including governance standards. For contracts not financed by the Bank, but within the scope of a Bank-financed project, the Borrower may use other procedures if the Bank is satisfied that they ensure that the goods, works, non-consulting services or consulting services procured are of a satisfactory quality, compatible with the other elements of the project, consistent with the project objectives, delivered or completed in a timely manner, and are priced so as not to have an adverse effect on the economic and financial viability of the project.
131. **Compliance with anti-corruption guidelines:** As stated in the Bank's Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, the Borrower ensures that, for IPF with DLI activities, preventive measures are in place (e.g. application of Bank's debarment list) and to report and investigate allegations of misconduct. Remedial measures apply only to those expenditures financed by the Bank.
132. **Procurement Methods and approaches.** The analysis and research undertaken, as part of PPSD will help MTCEN design the different procurement approaches and methods to be used to deliver the Project's Procurement Objectives. It is likely there will be several different procurement approaches and methods. The selection of the recommended procurement approaches and methods should only take place once all realistic options have been identified, described and appraised through the PPSD.

133. **Standard Procurement Documents.** For international competitive procurement, MTCEN shall use the Bank's Standard Procurement Documents (SPDs), available on its external website at www.worldbank.org/procurement/standarddocuments. For Procurement involving national competitive Procurement, MTCEN may use its own Procurement Documents, acceptable to the Bank.

Thresholds for procurement approaches and methods (US\$ thousands).

Works			Goods, IT and non-consulting services		
Open international ≥	Open national <	RfQ ≤	Open international ≥	Open national <	RfQ ≤
10,000	10,000	300	3,000	200	300

Prior review thresholds (US\$ Millions).

Type of procurement	Threshold (US\$ millions)
Works (including turnkey, supply & installation of plant and equipment, and PPP)	10
Goods, information technology, and non-consulting services	2

134. **Prior Review Threshold:** Selection decisions subject to Prior Review by Bank as stated in Appendix 1 to the Guidelines Selection and Employment of Consultants:

	Selection Method	Prior Review Threshold	Comments
1.	Competitive Methods (Firms)	Above US\$ 1,000,000	
2.	Single Source (SSS) (Firms)	Above US\$ 1,000,000	
3.	Individual (competitive)	Above US\$ 300,000	
4.	Individual (SSS)	Above US\$ 300,000	

Note:

- These thresholds apply to all procurement activities regardless of their procurement/selection methods. There is no automatic requirement to undertake prior review for direct selection for value less than these thresholds;
- The determination of whether a contract meets the procurement prior review threshold is based on the estimated value of the contract or the package -when the selection document contains more than one lot/slice including all taxes and duties payable under the contract; and
- Irrespective of the above thresholds, technical aspects of procurement documents, including technical specifications and nonlegal terms of reference (TORs), are reviewed and cleared by the Team leader.

135. **Short list comprising entirely of national consultants:** Short list of consultants for services, estimated to cost less than US\$ 300,000 equivalent per contract, may comprise entirely of national consultants.

136. **Summary of the PPSD:** The PPSD prepared by MTCEN with Bank's support has shown that all project's procurement will be carried out through competitive and innovative approaches which will allow MTCEN achieve value for money (VfM) and the project development objectives (PDOs). The challenges related to institutional bottlenecks and procurement delays are foreseen under the

GovTech project. To mitigate the identified risks, the following measures are proposed: (i) train the DU staff on the Bank's Procurement regulations in general and on the Banks Standard procurement documents for the procurement of IT systems, in particular; (ii) designate the key members of the DU, namely a Procurement Specialist (PS) whose experience and professional qualifications have previously been satisfactory to the Bank; and (iii) make sure that the Project Manual of Procedures clearly describes how procurement operations will be carried out in an optimized way to support the development objectives of the project and deliver value for money.

137. **Operating costs.** This would include all expenses necessary to ensure proper implementation of the project, including but not limited to local travel, communication and bank charges. The quarterly budget for operating costs would be prepared by the MTCEN and cleared by the Bank.

138. **Monitoring & Evaluation.** The DU, anchored in the MTCEN, will assume principle responsibility for coordinating the M&E and reporting of project outcomes and results. All the ministries and agencies involved in this multi-sector project will be responsible for collecting and sharing data with the DU.

ANNEX 3: Implementation Arrangements and Support Plan

139. **This section describes how the Bank will support implementation of the Program**, with particular emphasis on: (a) reviewing implementation progress and achievement of project results and DLIs; (b) providing support for resolving emerging project implementation issues and building institutional capacity; (c) monitoring the adequacy of systems performance and monitoring compliance with legal agreements; and (d) supporting the government in monitoring changes in risks.
140. **The Digital Transformation for User-Centric Public Services project will require focused support from the World Bank team particularly during the early stages.** The main challenge will be to strengthen the capacity of implementing agencies to plan activities and coordinate implementation with the different line ministries involved. During the first twelve months, funds will be used to provide technical assistance to implementing agencies to address the weaknesses identified during detailed assessments. It will be particularly important to support the MTCEN in the rolling out of the project, including the establishment of a monitoring system to monitor results. Funds will also provide focused technical support to implementing agencies in the areas of governance and IT in relation to the activities identified.
141. **Technical and Change Management Support.** The Bank team has supported the Government on the sequencing of reform measures, providing technical advice on specific design elements and the overall approach to change management. The Bank team will provide regular support on change management and the sequencing of reform, as well as review and quality assurance for the technical design and specifications of major procurement packages. The Bank team will liaise closely with the international change management experts (to be hired under the project; and in continuation with the Bank's effort in this matter as part of the Collaborative Leadership program) to ensure that change management issues are in the forefront. Thus, from the inception of the operation, the client project team will be coached and provided with the necessary training by the Bank project team. More specifically, the project will finance a program of on-demand technical assistance (See component 2) to assist the relevant government agencies in the achievement of the objectives, investments and DLIs under the program; including (i) development of a change management strategy and action plan to facilitate the adaptation and ownership by all actors and stakeholders involved in this project; (ii) collaborative leadership training and institutional communication to help implementing agencies better coordinate implementation of the reform; and (iii) information, education, and communication (IEC) strategies for each sector for their e-services to facilitate outreach to beneficiaries and stakeholders.
142. **Result Monitoring.** Regular supervision missions will assist the Government in tracking progress towards the achievement of the intended project results and advice on adjustments in project design and the reform strategy as needed to support the achievement of the project objectives. This will ensure that outputs translate into real impact in terms of a more efficient and effective public sector management.
143. **Mid-Term Review.** A mid-term review will be conducted by the Bank team to assess the progress of the project and will eventually adjust the project design and DLIs.
144. **Procurement.** During project implementation, the Bank's procurement specialist will provide regular supervision, in line with procurement guidelines. Procurement implementation support by the Bank will include: a) providing training to the Government and the DU; b) providing detailed guidance on the Bank's Procurement Guidelines; c) reviewing procurement documents and providing timely feedback; and d) monitoring procurement progress against the Procurement Plan. In addition, post reviews will be carried on selected contracts subject to post review. Contract deliverables will be physically inspected – as appropriate and feasible.

145. **Financial Management.** The Bank will conduct financial management implementation support and supervision mission every six months following the project effectiveness and more often if required. In addition, the regular IFRs and annual project audit reports will be reviewed by the Bank. As required, a Financial Management Specialist will assist in the implementation support and supervision process. Financial Management implementation support by the Bank will thus include: (i) providing training to the DU's financial management unit and the project team, and (ii) reviewing the project's financial management system and its adherence to the Project financing agreement, disbursement and financial information letter (DFIL) and Project Operations Manual, including all financial management arrangements,
146. **The team will maintain continuity and a regular dialogue with Government counterparts on all relevant operational, technical and policy issues.** There will be two formal supervision and implementation support missions per year complemented by ongoing support provided by field-based staff in Tunis, Tunisia.

Table - Implementation Support Inputs

Time	Focus	Skills needed	Staff weeks Estimate
First twelve months	Procurement training (two sessions)	Procurement Specialist	2
	FM training and supervision	FM specialist	2
	Dialogue with Client & Team leadership	TTL	4
	Technical and procurement review of the bidding documents	Procurement Specialist	1
		PFM Specialist	1
		GovTech/IT Specialist	2
		Social Protection Specialist	1
Education Specialist		1	
Change Management	Change management Specialist	2	
12-24 Months	Financial management disbursement and reporting	FM specialist	4
		Disbursement specialist	2
	Change Management	Change management Specialist	1
Rest of the Project	Project supervision coordination & technical and sector	TTL and Sector Specialists	12
	Change Management	Change management Specialist	1

Table - Skills Mix Required

Skills Needed	Number of Staff Weeks per year	Number of Trips	Comments
TTL Project Management and Support	20 weeks	None	Field based
Procurement Specialist	6 weeks	2 missions per year	Field based
E-Government & IT/GovTech Specialist	6 weeks	2 cost-shared missions per year	
Education Specialist	4 weeks	2 missions per year	Field based
Social Protection Specialist	4 weeks	2 missions per year	Field based
FM Specialist	4 weeks	2 missions per year	Field based



ANNEX 4: Digital Divide: Addressing Gender and Inequalities

Population Segment	Potential barriers to accessing GovTech services and providing feedback on them	Project interventions addressing the barriers
Women in rural areas	<ul style="list-style-type: none"> • Weak internet access • Low mobile phone ownership • Low mobile internet useⁱ • Low literacy levels • Low education level • Low digital literacy (technical and ICT skills required to use a computer, a mobile phone or internet) • High safety and security concerns (confidence in using IT resources) • Lack of perceived relevance of using internet/mobile internet • Restrictive social norms where women’s activities in the public sphere are constrained resulting in lack of social networks (with less chances to obtain the information and resources needed) and reducing their mobility • High costs of internet/mobile internet, lack of resources and weak economic participation 	<p>The activities and mitigation measures summarized below will be undertaken and comprised in the project design to address issues of access constraints to and quality of digital services.</p> <ol style="list-style-type: none"> 1. Deepening engagement with women and vulnerable groups: A comprehensive Stakeholder Engagement Plan will include targeted surveys to get feedback from women, and vulnerable groups, youth, low-income households, illiterates, disabled persons, elderly, households from lagging regions) to identify the barriers to technology use. As part of this SEP, focus group discussions will also take place to allow identifying the key barriers to women, the poor, the elderly and the disabled’s access to information and use of technology in the project’s areas of intervention. Consequently, the actions to address specific barriers will be reflected to the succeeding activities, including communication and roll out. 2. Conduct citizen journey mapping exercises to identify the needs, behaviors and problems faced by users (particularly vulnerable groups) when using public services and interacting with public service providers for selected life events in the area of intervention of the project. During preparation, multiple challenges faced by citizen-users have been identified and citizen journey mapping exercises will help deepen them: (i) weak access to information, weak and uneven access to service provider facilities, especially in the rural regions; (ii) slow, inefficient, costly and complex procedures, weak accountability; (iii) high incidence of corruption; (iv) inefficient/inexistent citizen feedback mechanism. 3. Monitoring and evaluation: Creation of a baseline and collection of gender and vulnerable groups disaggregated data (age, income, level of education, marital status, region) for performance management, for each of the PDO-level indicators, and intermediate indicators. 4. Providing access to digital services via multiple channels (online, physical and mobile facilities with agent and operator assistance) to reach the maximum of users: digitized access points, postal offices, and other existing public facilities (especially for those where infrastructure is suitable for the physically disabled). 5. Implement targeted public information and sensitization campaigns via traditional channels (grassroots campaigns,
Women in general	<ul style="list-style-type: none"> • Lack of thorough analysis on gender gap to identify whether women (different groups of women by age, level of education, income, ...) can easily access information in practice and if they participate in the decision making related to e-governance policies and strategies as well as the legal framework (Are they included in committees that devise these policies and strategies? Are their voices heard?) 	
Young men and women, particularly in rural areas	<ul style="list-style-type: none"> • Weak internet access • High costs, lack of resources and weak economic participation • Lower use of IT for accessing information and providing feedback 	
Illiterate population	<ul style="list-style-type: none"> • Low access to adapted information channels to allow getting the information in a form that can be used by illiterate population (e.g. voice recognition) 	



	<ul style="list-style-type: none"> • Lower digital literacy (technical and ICT skills) and economic participation • Lower use of ICT tools for accessing information and providing feedback 	<p>brochures, newspapers, radio spots, etc.) and digital tools (websites, SMS, chatbots, etc.). These campaigns will also consider the different needs of the population segments. For example, campaigns for women can be tailored by: (i) incorporating a basic internet literacy session to address low digital literacy; (ii) offering an information session on internet security to raise their confidence in using the internet; (iii) rolling out reach-out campaigns at the grass-root level to encourage them to access a nearby digital point (which will be established under this project), considering the restrictive social norm for women’s activities in the public sphere. Additionally, the project will support and incentivize proactive disclosure of information through DLIs and results indicators measuring responsiveness and conformity to existing and new regulations (open data and access to information).</p> <p>6. Institutionalization of a centralized mechanism “Public Service Delivery Barometer” to improve monitoring of citizen feedback and satisfaction on specific services and subsequent government responsiveness: The barometer will collect feedback from different subgroups through various mechanisms (surveys, SMS, etc.). Results will be made public. The Barometer questions will account for gender differences and be disaggregated at vulnerable population levels</p> <p>7. Training and capacity building: A training component as part of the project’s technical assistance will be conducted to create awareness of the gender and vulnerable groups’ implication of the digital transformation. Training will be provided, particularly, to relevant policy makers and bureaucrats, to enhance their awareness and understanding of the different impacts of the current operation on women and vulnerable groups in Tunisia. Training will also include a module on citizen centricity.</p>
Low-income beneficiaries /households	<ul style="list-style-type: none"> • Weak internet access • Lower skills • High costs, lack of resources and weak economic participation 	
Physically disabled citizens	<ul style="list-style-type: none"> • Lack of access to digital tools and physical provider facilities due to physical disability (i.e. the visually impaired, limited mobility) and inadequacy of content, not user-friendly for the disabled (e.g. content needs to be audio and not video for visually impaired) 	
Elderly	<ul style="list-style-type: none"> • Low digital literacy (technical and ICT literacy and skills) • Limited mobility • Low access to adapted information channels to allow getting the information in a form that can be used by elderly (e.g. adequate language) 	

¹ The gender gap in mobile internet use is considerably wider than the mobile ownership gap in low and middle-income countries, according to “The Mobile Gender Gap Report 2018” (GSMA Connected Women).