Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 22-May-2021 | Report No: PIDA30789

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Djibouti	P174461	Djibouti Digital Foundations Project	
Region	Estimated Appraisal Date	Estimated Board Date	Practice Area (Lead)
MIDDLE EAST AND NORTH AFRICA	31-May-2021	22-Jun-2021	Digital Development
Financing Instrument	Borrower(s)	Implementing Agency	
Investment Project Financing	République de Djibouti	Ministry of Communications, Posts and ICTs (MCPT) / Ministere de Communication, charge des Postes et	

Proposed Development Objective(s)

The project development objective is to assist the Government in developing a favorable environment for the gradual introduction of competition and private-sector investment in ICT, and to promote the adoption of digital skills and services.

Components

1. Digital ecosystem and connectivity
2. Digital transformation and skills development
3. Project management
4. Contingent Emergency Response Component (CERC)

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	11.00
Total Financing	11.00
of which IBRD/IDA	10.00
Financing Gap	0.00

DETAILS

Private Sector Investors/Shareholders

Equity	Amount	Debt	Amount
Non-Government Contributions	1.00	IFI Debt	10.00
Private Sector Equity	1.00	IDA (Credit/Grant)	10.00
Total	**1.00**		**10.00**

Payment/Security Guarantee

Total	0.00

Environmental and Social Risk Classification

Moderate

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1.   **The Republic of Djibouti is a small, highly urbanized, lower-middle-income country (LMIC).** It covers an area of 23,200 square kilometers and is home to a population of around one million people. Djibouti's US$2 billion city-state economy is driven by a state-of-the-art port complex, among the most sophisticated in the world. The size of its economy limits its ability to diversify and increases its reliance on foreign markets, making it more vulnerable to market downturns. Faced with successive droughts that have exacerbated food and water insecurity, the country's traditionally nomadic people have settled primarily in urban areas, and around three-quarters of the population lives in cities [1] - some 58 percent in the capital, Djibouti-City, alone.

2.   **Rapid and sustained economic growth has accelerated in recent years, thanks to large public investments in capital-intensive infrastructure and activities to exploit the country's geostrategic location.** Over the last few years, real Gross Domestic Product (GDP) grew at more than 7 percent a year on average[2] to

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[1] Djibouti has one of the highest proportions of urban population in Sub-Saharan Africa.
[2] From 2014 to 2019

reach a nominal GDP per capita exceeding US$3,667 in 2019[3]. This growth has been driven in large part by high debt-financed investment, estimated at 57 percent of GDP, on average, in 2015–2016, complemented by Foreign Direct Investment (FDI) inflows of roughly 9 percent of GDP over the same period. Over the medium-term, economic performance was expected to continue to be stable, with growth forecast to average more than 8 percent per year during 2019-25; however real GDP growth, at constant market prices, is expected to decline by 1.0 percent in 2020[4] as a result of the COVID-19 pandemic.

3.   While the benefits of the steady economic growth have started to trickle down to Djibouti's citizens, growth has not been inclusive and has had limited effectiveness in eradicating poverty and unemployment as well as in empowering women, reflecting the dampening effect of high levels of inequality in social outcomes and significant spatial disparities. Poverty remains widespread, with one out of seven people (14.5 percent, in 2019, expected to rise to 15.3 percent in 2020) living on US$1.90 per day or less (in 2011 Purchasing Power Parity [PPP] terms)[5]. The unemployment rate is around 11.6 percent; however under-employment rate remains high, at 47 percent in 2017, an increase compared to 39 percent in 2015. Extreme poverty is concentrated in the Balbala slums on the periphery of Djibouti-City and in rural areas where remoteness and low population density are key constraints. Young people are particularly at risk of not getting a foothold in the labor market. While access to primary and secondary education has improved considerably over the last decade[6], the drop-out rate after primary school remains high and the literacy rate is low, especially in rural areas. Most young people do not participate in the formal economy, and unemployment is estimated at more than 70 percent among those under the age of 30[7]. The supply of vocational training does not meet the growing demand. In addition, the training sector is characterized by low enrollment capacity and strong urban bias. Women's access to income-generating activities remains also limited, including due to low literacy rates for women, about 39.5 percent (compared to 60.1 percent for men) and falling to only 9 percent in rural areas, as well as low levels of school enrollment for girls and high economic inactivity. Only 19 percent of women are employed compared to 81 percent of men, increasing the incidence of poverty among Djiboutian women[8].

4.   The country remains fragile and vulnerable to shocks, even though it exited the Fragility, Conflict and Violence (FCV) Harmonized List in FY21[9]. Weak institutional capacity has so far limited the Government of Djibouti's (GoD) ability to design and implement strong public policies[10], and has thwarted the types of governance improvements needed to bolster private sector development. Djibouti ranks below the average for International Development Association (IDA) countries on rule-based governance, quality of public administration, transparency and accountability. On Transparency International's 2015 *Corruption Perceptions Index* Djibouti ranks 99th out of 167 countries, while in the Worls Bank Group's (WBG) 2020 *Doing Business* survey, the country ranks 112th out of 190 economies, down from 90th in 2019. Specific weaknesses of the business environment highlighted in the report include trading across borders and starting a business, where it

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[3] Djibouti was one of the fastest growing economies in MENA since 2000 on a per-capita basis, growing faster than typical (or median) economies at similar level of development.

[4] Source: World Bank, Poverty & Equity and Macroeconomics, Trade & Investment Global Practices.

[5] WBG, Djibouti's Economic Update, 2019.

[6] The 2018 Systematic Country Diagnostic (SCD) for Djibouti notes that gross enrollment rates are 89 percent for primary, 47.1 percent for secondary, and only 9.2 percent for tertiary education.

[7] Djibouti Support for Women and Youth Entrepreneurship (P165558), PAD.

[8] USAID, Gender Equality and Women's Empowerment in Djibouti, 2020. Women who are economically active tend to be engaged in petty trade activities in the informal sector, such as the preparation and sale of food and handicrafts.

[9] https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations

[10] Including in negotiating favorable contracts with foreign entities with strong interest in Djibouti's potential and strategic location.

ranked only 147[th]and 123rd respectively. These are both areas where digitization of business processes could help. The fragility of its neighbors also spills into Djibouti, as the country has a long history of hosting refugees and migrants fleeing political and environmental crises, most recently the conflict in Ethiopia's Tigray region at the end of 2020. Refugees tend to cluster typically in poor areas, where their presence often worsens pre-existing issues. The impact of the COVID-19 pandemic and climate change further exacerbates Djibouti's fragility.

5.   **The socioeconomic impact of the COVID-19 crisis is particularly devastating as the pandemic has contributed to worsening the already precarious living conditions of vulnerable households with job losses, price shocks and other adverse factors.** According to Johns Hopkins University, as of April 9, 2021 some 9,722 cases and 94 deaths related to COVID-19 had been recorded in Djibouti[11]. In 2020, GDP growth is expected to have contracted while extreme poverty is expected to have increased, for the first time in two decades[12], reversing hard-won development gains. COVID-19 is also reversing fiscal consolidation efforts started in 2015 and is having severe spillover effects on the GoD's fiscal situation. The overall fiscal deficit is expected to widen to 2.3 percent of GDP up from 0.5 of GDP in 2019 as a result of the fall of total revenue and COVID-19 related public expenditure. In April 2020, the GoD launched the "*Pacte de Solidarité Nationale*[13], a reference document framing its socioeconomic response to the pandemic. The "pact" highlights the impact and financing needs of three priority sectors: health, social and MSMEs.

6.   **Climate change also poses a significant threat to Djibouti's stability, development and growth, making it critical for the country to increase its resilience capacity for current and future crises.** Djibouti is a coastal country characterized by a desert climate with sporadic rainfall, and it suffers from chronic water insecurity, which is projected to increase by 2050. Djibouti's climate hazards include coastal flooding, flooding, extreme heat and droughts. For instance, the recent floods in November 2019 impacted 250,000 people in the spontaneous settlements of the capital city. Climate threats are projected to grow in frequency and severity as temperatures increase, precipitation patterns shift, and sea levels rise. Other risks are also on the rise, such those related to vector-borne and water-borne diseases, especially as sanitation and sewage systems are inadequate or damaged. The devastating consequences of natural disasters are most acutely felt by those most vulnerable, including those living in extreme poverty and people on the move (refugees, migrants and internally displaced people), as they lack the capacity to adapt to climate-related shocks.

7.   **To operationalize its overarching long term vision for Djibouti's development (called *Djibouti Vision 2035*) approved in 2014, the GoD laid out a ten-year plan entitled *Strategy of Accelerated Growth and Promotion of Employment* (SCAPE) to be implemented in two five-year phases covering the periods 2015-2019[14] and 2020-2024.** The first phase aimed to modernize infrastructure and reform sectors for greater efficiency and effectiveness, with a focus on four key sectors - transport and logistics, telecommunications/Information and Communication Technologies (ICT), tourism, and fishing, while the second phase aimed to address social inclusion, connectivity, and regional integration and give an enhanced role to the private sector. In accordance with the GoD 2030 vision, digital economy solutions are expected to develop under

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https://www.indexmundi.com/coronavirus/country/dj

[12] Real GDP growth is expected to decline by 1.0 per cent in 2020, and the extreme poverty rate at US$1.90 per day is expected to increase from 14.5 percent in 2019 to 15.3 percent in 2020.

[13] https://www.dj.undp.org/content/djibouti/en/home/national-solidarity-pact.html

[14] The GoD has invited the WB to assist in in undertaking a mid-term review of the SSI with funding generously provided from the Public Private Infrastrcuture Advisory Facility (PPIAF), under project P171784. A draft report is currently being reviewed by by the Government.

enhanced competition and should boost innovation and pave the way for new opportunities for the region's educated youth by way of enhanced economic growth and better functioning domestic labor market.[15] Moreover, digital technologies and relevant digital policies are playing a key role for digital connectivity and essential digital solutions to strengthen and accelerate the collective response to and recovery from COVID-19.

Sectoral and Institutional Context
Djibouti's Digital Paradox

8.   **While the country has made significant inroads in establishing itself in the regional connectivity and data markets, the potential of its ICT sector remains largely untapped domestically, leading to a digital paradox.** To achieve *Djibouti Vision 2035's* policy objectives, the GoD set up an ambitious *National Strategy for ICT Development* and adopted a ten-year ICT roadmap in 2014 (the *Integrated Strategic Plan 2014-2024*, or SSI), which aims to develop and to generalize access to ICT across the country. Djibouti has by now become a key digital connector for data with its neighbors, with the country now linked via two cable landing stations[16] to nine submarine cables with links to Europe, East Africa, the Middle East, the Eastern Mediterranean and South Asia. This puts Djibouti at a similar level of international connectivity as South Africa. Furthermore, the creation in 2013 of the Djibouti Data Centre (DCC), a Tier three[17] data centre facility in Djibouti-City, serves as a major meeting point for submarine cable systems in the region, and complements the Djibouti Internet Exchange[18] (DjIX). Domestically, however, service provision is restricted to the state-owned monopoly provider, Djibouti Telecom (DT), and Djiboutians still do not benefit from generalized access to ICT across the country.

▪   **Djiboutians do not fully benefit from the country's powerful infrastructure of submarine cables and data center, as the ICT sector is marked by incomplete coverage of the territory, relatively high prices and poor quality of service**. Consequently, access to telecommunications and internet services in the country remains limited. Djibouti lags behind most of its neighbouring and peer countries in terms of Internet usage. When it comes to mobile internet, which is widely used in developing countries around the world as a substitute for and complement to fixed-line solutions, the penetration rate (per 100 people) stood at a low 23 percent in 2020.[19] As some 78 percent of the population in Djibouti is urban, , it should in theory be less costly to cover the population in Djibouti with a digital signal. But nevertheless the country is lagging other countries that face steeper deployment challenges and costs and has not yet achieved a total 3G coverage of all its urban population, let alone 4G. The sluggish development of the ICT sector has created significant digital divides, along income level, geography and gender lines (e.g., a gender gap of 8.3 percent in terms of internet use influenced by the lower socio-economic position and education levels of women, DISED survey, 2018). These gaps undermine the transformative potential of digital services while currently excluding the most vulnerable from the associated benefits.

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[15] As described in the upcoming MNACE Flagship report (P168573), a radical shift toward the digital economy will provide a new social contract focused on using technology to empower the youth. Furthermore, a "New Economy Agenda" could foster private sector development by improving productivity thanks to IT technologies, increasing market contestability thanks to digital platforms, reducing search and matching frictions in both product and labor markets, mitigating trust issues between economic actors as well as solving issues related to firms' access of capital.

[16] Djibouti Telecom has built the YAC A Cable Landing Station (YAC A CLS) and the Haramous Cable Landing Station (Haramous CLS).

[17] A Tier III data center is defined as one that is concurrently maintainable with redundant components as a key differentiator, with redundant distribution paths to serve the critical environment. See: https://uptimeinstitute.com/tiers

[18] http://www.djiboutidatacenter.com/en/page/djibouti-internet-exchange-djix

[19] "Unique" mobile-broadband subscriptions per 100 inhabitants, GSMA.

▪ **The performance of Djibouti's ICT sector lags behind peers in Sub-Saharan Africa (SSA) and the Middle East and North Africa (MENA).** In 2017[20], Djibouti ranked 158th out of 176 economies in the ICT Development Index (IDI) developed by the International Telecommunication Union (ITU), the lowest position among low-income or middle-income countries (LMICs). More worrisome, the country ranked much higher back in 2010 (130th out of 190 countries in 2010), which hints at the stagnation of Djibouti's digital ecosystem, by comparison to its peers which are increasingly taking advantage of digital transformation. The level of affordability of ICT services remains low, according to the ITU,[21] as a "high-usage" basket of mobile services represented more than 24 percent of GNI per capita in 2019, putting Djibouti at the 162nd place in the World (out of 182 countries) and far worse than other SSA/MENA countries such as Côte d'Ivoire and Morrocco (7.5 and 2.48 percent of GNI per capita respectively).

9.   **Djibouti has only recently started to liberalize its telecommunications/ICT market, and the lack of competition is one of the main reasons behind the digital paradox.** DT's outward-oriented strategy has not been conducive to expanding broadband access and use in the domestic market. The Djibouti ICT sector is one of the last two full monopoly telecommunication sectors in the world, along with Eritrea[22]. DT, a state-owned enterprise (SOE), enjoyed a monopoly on first, middle and last-mile connectivity[23], providing all ICT services in the country (including fixed telephony, mobile services, and broadband)[24]. DT's international bandwidth is not widely offered to local consumers and businesses, leaving the domestic market in short supply. Besides, DT focuses most of its investment on purchasing international capacity (via connections to a large number of submarine cables), while investments to expand and upgrade the national backbone have remained limited due to the absence of competition. The lack of competitive epressures has directly impeded the growth of the domestic telecommunications/ICT market, both in terms of coverage and technology, by deterring investment in the domestic market, including by specialized operators (e.g. Internet Service Providers (ISPs) and stifling service delivery and innovation.

An urgent need for Djibouti to establish the foundations for its Digital Economy

10.   **Djibouti has a lot to gain from building a vibrant, inclusive and safe digital economy and harnessing the power of digital transformation.** *Djibouti Vision 2035* acknowledges the role of ICTs as a "*powerful tool for increasing production, competitiveness and improving well-being*". In fact, the development of the ICT sector and the digital economy can contribute to economic growth through its respective added value, while in parallel stimulating the growth of other sectors, by fostering productivity and innovation in Micro, Small and Medium Enterprises (MSMEs), and in turn driving job creation and economic diversification. This would be an especially appealing prospect for the Djiboutian youth[25], who are more internet savvy than their peers, and many of whom

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[20] The data for 2017 was published in the 2018 edition of the ITU's *Measuring the information society* report. Rankings were not published in the 2019 edition as the methodology changed.

[21] https://www.itu.int/net4/itu-d/ipb/

[22] The first steps towards market opening came in July 2019 when the Ministry of Communication, in charge of Posts and ICT (MCPT) awarded a license to IIB Group Holdings, for its subsidiary Afrifiber to construct a fiber optic network in the country. However, the license was not awarded through a competitive process and it is unclear to what extent Afrifiber is able to compete with the incumbent.

[23] The presence of the state monopoly does not appear to be justified by public interest objectives such as promoting universal access, since, as discussed above, some parts of the country, especially in the north, are largely underserved.

[24] Djibouti Telecom's operations are built around three business segments: fixed telephony, mobile (GSM, W-CDMA, LTE) and internet access (IP, data and ADSL networks).

[25] The youth of Djibouti, below the age of 14, formed 29 percent of the population in 2019, though this is a decrease from the level of 41 % in 2000; see: https://www.theglobaleconomy.com/Djibouti/percent_children/.

currently are unable to find jobs or are stuck in low wage employment. By accelerating digital transformation and digital leapfrogging, Djibouti's position as an essential trade hub could also be strengthened in the rapidly evolving regional context. For instance, the digital economy could catalyse development of an ecosystem of digital platforms for transport, logistics and distribution. Similarly, Djibouti could take advantage of its international ICT infrastructure to promote outsourceable activities such as call centers and data hosting and analytics. In addition, the development of the country's digital economy can also increase the country's resilience to shocks, whether economic or related to climate change. The benefits of a high-performing digital economy in Djibouti, based on a well-developed ICT sector, could thus be manifold and transformational. Sector development opportunities are closely assessed in cooperation with the International Finance Corporation (IFC).

11.   **Djibouti's current telecommunications/ICT market structure is holding back the emergence of a vibrant, inclusive and safe digital economy in the country, putting it at risk of being left behind in digital transformation.** Private sector development continues to be constrained by relatively high costs for key factors of production, including the price of telecommunications and high speed broadband, to such an extent that ICT in Djibouti can be considered a structural obstacle rather than a competitive advantage. DT's monopoly has also undermined the development of a national payments system as the prices it imposes transactions and for a Central Bank subscription to the network are considered too high. DT's monopoly has also held back innovation, with a mobile money service being introduced only in mid-2020, more than a decade after other African economies, such as Kenya and Tanzania. Such fundamental financial infrastructure – another pivotal building block for a thriving digital economy – is thus held hostage by this situation.

12.   **The availability of digital skills in the country is limited**. Djibouti recognizes digital skills as a basic requirement for economic growth, along with literacy and numeracy skills. ICT firms have high demand for specialized engineers and technicians trained in areas such as coding and cybersecurity, as well as for professionals with managerial skills for the digital age. However, training in *basic digital skills* on a large scale is currently lacking, as the vast majority of Djiboutians are not familiar with digital tools and platforms, and have yet to acquire the basic knowledge needed to use digital technologies. Underpinning the development of digital skills are basic foundational skills, such as literacy and numeracy, but these are challenged at the start of the school-age years, as poor access and quality of instruction remain major obstacles. The lack of *intermediate and advanced digital skills* hinders the growth of Djibouti's ICT sector and digital economy; it affects the ability to retain talented individuals who may be tempted to seek work abroad. Furthermore, an important gender gap in digital literacy levels persists, and the ICT sector is marked by limited participation of women, notably due to their low enrolment in Science, Technology, Engineering and Mathematics (STEM) courses[26]. The expanded use of ICT, digital learning and skills development are key pillars of the Ministry of Education and Professional Development (MENFOP)'s reform effort, which is still at an early stage and requires additional investment to achieve scale and reach the 100 plus schools in remote areas (see Table 2: Connectivity of educational institutions (source: MENFOP)).

13.   **The business environment in Djibouti is improving, but the digital entrepreneurship ecosystem is still at a nascent stage**. The business environment in Djibouti has significantly improved in recent years, owing to the creation of "One-Stop Shops" to facilitate business registration, the adoption of a commercial code, the reduction in the cost of registering a business, a new civil code (the first since the country's independence), and amendments to the fiscal code to lower the costs of starting a business and registering property. The GoD has

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[26] Based on qualitative interviews, notably with the Chamber of Commerce. Data point will be collected at baseline.

also established a partial credit guarantee fund[27] to facilitate access to funding for MSMEs, and created a Leadership and Entrepreneurship Center (CLE) that serves as a coworking space, incubator, training center, and fab lab[28]. The impact of these initiatives remains to be seen, and the digital sector still has a long way to go to attract funding and stimulate the creation of cutting-edge, innovative start-ups. The main barriers to digital entrepreneurship include a lack of technical and managerial skills, limited funding, underperforming telecom infrastructure, low broadband penetration, a lack of mentors and entrepreneurial support structures, and legal and regulatory hurdles.

14. **Reforms to strengthen the telecommunications/ICT sector and to make high-quality ICT services available at affordable prices have been long pending. But the GoD has recently started taking concrete steps towards addressing the sector bottlenecks in a rapidly evolving regional environment, with the set-up of a sector regulator.** The moves to open the telecommunications market currently being undertaken in Ethiopia might spur greater efforts from the GoD to liberalize its own telecommunications market. In 2019, the GoD commissioned the United Nations Development Programme (UNDP) to prepare a roadmap ("*Feuille de Route*"), whose three main recommendations were to (i) open the market to competition, (ii) increase DT's the readiness to face competition through partial privatization, and (iii) setup the sector regulator[29].

- **A law establishing a multi-sector regulator (ARMD) was passed in December 2019 and its operationalization is supported by a technical assistance (TA) funded by the Public-Private Infrastructure Advisory Facility (PPIAF). However, as of May 2021, the ARMD is not yet operational. [30]** As early as 2004, a law had been passed to establish a regulator – the Djiboutian Agency for the Regulation of Telecommunications (*Agence Djiboutienne de Régulation des Telecommunications*, ADRT)[31]. A commitment to establishing a sectoral regulator was also included in the 2014 SSI. But it was only in December 2019 that a law establishing the Djiboutian Multisector Regulatory Authority (*Autorité de Régulation Multisectorielle de Djibouti*, ARMD) was passed. The latter is intended to cover the telecommunications, posts and energy sectors initially. Once the sector regulator is fully operational, a key prerequisite for opening the domestic market to competition will be in place.[32]

- **The SCAPE strategy acknowledged that one means to foster Djibouti's digital economy would be to open the telecommunications market to competition, but it remains to be implemented**. Since 2014, the GoD has been considering the introduction of a second telecommunications operator with extended discussions between the WBG and the GoD on the potential issuance of a second telecommunications license through an international competitive process, and the WBG has provided a policy note outlining several options[33]. However, as of today efforts to liberalize the sector have not progressed much, despite growing interest from private sector to enter the broadband market (e.g. specialized operators such as ISPs), and the Ministry of Communications, in charge of Posts and Telecommunications (MCPT) awarding in July 2019 a license to IIB Group Holdings, for its subsidiary Afrifiber to construct a fiber optic network

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[27] https://www.presidence.dj/conseilministresuite.php?ID=7&ID2=2016-03-15
[28] A Fab Lab, or digital fabrication laboratory, is a place to experiment, to create, to mentor and to invent: a place for digital learning and innovation.
[29] UNDP. Jan 2020, *Feuille de route pour la libéralisation du secteur des télécommunications*.
[30] Undertaken with financing from PPIAF (Public-Private Infrastructure Advisory Facility) (P171784).
[31] Loi n°80/AN/04/5ème L Portant Réforme du Secteur des Technologies de l'Information et de la Communication.
[32] As of May 2021, the Director-General and Members of the Board of ARMD had not yet been appointed, so the regulator could not yet be considered operational.
[33] The World Bank Group. Unpublished 2018. - *Realizing the Digital Potential of the Republic of Djibouti – Policy Note on Possible Introduction of a Second Telecommunications Operator.*

in the country. The GoD has recently agreed to review the outdated *Law n°80/AN/04/5ème L on the Reform of the Information and Communication Technologies Sector*, with funding from the IDA-funded Public Administration Modernization Project (PAMAP, P162904).

- **DT has developed a new transformation strategic plan**[34], comprising several components: an international, regional and national strategy with two major programmes, Djibouti: Connector & Connected (*Djibouti: Connecteur & Connecté*) and Digital Djibouti (*Djibouti Digital*). The focus of DT remains however very much outward looking, e.g. becoming a regional digital hub. A significant change which has occurred in late 2020 was the transfer of assets of DT to a sovereign wealth fund, which now manages also the electricity utility and the port.

- **There is a mutual opportunity for both the Government and the nascent private sector to initiate a virtuous circle for private sector investment in the national digital infrastructure.** Alternative operators could benefit from having access to competitive Government tenders to gain a foothold in the Djiboutian market, such as via the provision of telecommunication services to selected government buildings and administrations via competitive tendering. At the same time, market entry by private sector firms, mobilizing their own private capital, would complement the efforts made by DT to deploy a modern network infrastructure across the country, to improve the coverage and quality of services via this infrastructure. This would further allow the GoD to focus and provide funding in areas which are not commercially viable, for instance to connect remote communities with fiber or other suitable modern digital technologies.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

The project development objective is to assist the Government in developing a favorable environment for the gradual introduction of competition and private-sector investment in ICT, and to promote the adoption of digital skills and services.

Key Results

PDO Level Indicators

15.   **The following PDO results indicators are proposed:**

To assist the Government in developing a favourable environment for the gradual introduction of competition and private sector investment in ICT:

a)   The number of licenses and authorizations[35] for providers of telecommunication infrastructure and services issued by the ARMD (regulatory authority);

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[34] https://lanation.dj/transformation-de-djibouti-telecom-le-numerique-au-coeur-dun-challenge-majeur-pour-les-metiers-doperateur-telecom/

[35] In general terms, network operators constructing their own infrastructure, or using spectrum, would need a license. However, service providers, such as ISPs, or resellers of services, such as value-added service providers, may require only an authorization. Nevertheless, it is useful to measure both licenses and authorizations as a measure of the development of the digital ecosystem.

b)   The number of internet users, aged 15 and above, as a percentage of the population, of which percentage female;

To promote the adoption of digital skills and services:

c)   The number of schools, government departments and other public institutions provided with enhanced internet access, of which the number in rural areas, and the number of students benefitting, under the project, of which the number who are girls of young women;

d)   MSMEs with an online presence and/or using digital technologies, of which those with a female owner or a majority of female employees..

D. Project Description

16.   The proposed operation Djibouti Digital Foundations Project ("*Digital Djibouti")* seeks to be transformational in that it would support deep and systemic change in the telecommunications/ICT sector with the potential for large-scale impact on the growth of the digital economy in Djibouti. It aims to help Djibouti harness its domestic digital potential ('Djibouti connected') by mobilizing the public and private sectors, in particular private capital mobilization (PCM), ensuring that more citizens and businesses have access to quality, affordable internet connectivity, easy access, and the digital economy becomes an engine for growth, innovation and job creation. The project is organised around three components , which would stimulate both the supply of, and demand for, digital services, and and a fourth Contingent Emergency Response Component (CERC), which are described below (and in more detail below). The sequencing of project activities is important to ensure an optimum impact of project components.

Component 1. Digital ecosystem and connectivity (US$8.0 million, of which US$7.0 million IDA and $1.0 million private capital)

17.   This component is designed to help Djibouti lay the groundwork for accelerating the emergence of a vibrant, inclusive and safe digital economy, by creating a favorable legal and regulatory environment for the further gradual introduction of competition, and by enhancing the level of digital connectivity (broadband) available, in particular for Government and schools. Important actions and reforms are needed to gradually open the sector to competition and the induced private sector capital mobilization, reduce barriers to entry and encourage the GoD to allow effective private investment in the sector, including through specialized operators such as Internet Service Providers (ISPs). If the project does not support the GoD's efforts to introduce competition in the provision of broadband internet services, then the other planned components, pertaining to the provision of connectivity for Government and schools, may not prove effective as prices for internet access may remain too high. In this context, a phasing of the project is planned, initially focusing on policy reform and, later on, the development of competitive provision of connectivity to government sites via at least one alternative operator to Djibouti Telecom. While market liberalisation is a necessary condition for the development of Djibouti's digital economy, it is not a sufficient condition, and complementary efforts will need to be put in place to attract investors.

18.   **For the implementation phase (see Subcomponent 1.2 b), it is proposed that no disbursement takes place until certain preconditions are met** which would be associated with moves towards market liberalisation that facilitate private capital mobilization due to expected results of tangible output of the subcomponent. For that purpose the following disbursement conditions will have to be met by the GoD: (i) the nomination of the General Director and Board Members of the ARMD, as an essential step for the authority to start work; (ii) the award of licenses (more than one) by ARMD for internet service providers (ISPs) to compete in the market for provision of internet capacity; and (iii) have prepared and published the Resettlement Policy Framework (RPF).

Sub-component 1.1: Digital enabling environment (US$2.0 million)

19.   **The activities supported under this sub-component fall under the following three areas of intervention:**

Stengthening key public institutions for a vibrant ICT sector.

   a) **TA for building the capacity of the MCPT in structuring the telecom/ICT market and fostering/monitoring the emergence of a vibrant digital economy** through supporting the Ministry's adaptation to the new ICT legal and regulatory framework and to enable policy oversight;
   b) **Operationalization of the ARMD,** an entity independent of the GoD and of DT, as the regulatory authority for the telecommunications sector. Support will include contributing to covering the start-up and initial operating costs of the ARMD[36], such as those related to hosting meetings of the Board of Directors, stakeholder consultation meetings, and equipment acquisition (laptops, printers etc); and targeted technical trainings for staff hired by the ARMD on telecoms regulation.

Supporting the gradual introduction of competition and private-sector investment in ICT

   c) **Options study to inform the GoD on possible paths for developing a favorable environment for the gradual introduction of competition.** This could cover DT's preparation for market opening, the choice of a strategic partner; the licensing of new ISPs, and the opening up of ancillary markets to private investments;
   d) **Support for the organization of stakeholder consultations (virtually and in person), organized by the MCPT and the ARMD, on the gradual opening of the market to competition.** The consultations would convene key stakeholders, including the private sector, consumer representatives and other interested parties, to solicit views on the future market environment and develop a consensus on the gradual opening of the market to competition;
   e) **TA to the GoD on preparing the required legal and regulatory documents**[37] for developing the gradual opening of the market to competition**,** based on the outcomes of the options study and consultations;

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[36] Some technical assistance is also being provided under a PPIAF funded technical assistance project (P171784) covering advice on the organigram, staffing and budget of the new organization (including by securing an operational budget over several fiscal years through licenses fees, spectrum fees etc.), as well as legal status, covering both the telecoms and energy side, The PPIAF Trust Fund is bank executed and thus is limited in the level of support it can provide.

[37] Law, decrees, authorisations and licenses needed to modernise Djibouti'si legal framework on digital networks, usages and services.

Promoting the emergence of Djibouti's digital economy

f) **Support for the establishment of an ICT market observatory**, to allow to track progress with the impact of new policies and measure accurately digital gaps (e.g., gender gap, urban/rural coverage, fiber optic connections), and financing for a baseline study of the usage of ICTs in the country, including mobile money[38], as well as a baseline study on the availability and quality of digital infrastructure.

g) **TA to assist the MCPT with carrying a final review of the *Schéma Stratégique Intégré* (SSI), which is due for completion in 2024, and preparing the subsequent strategic document.** The review will aim to assess the achievements and progress made against the SSI objectives since the start of its implementation in 2014[39];

h) **TA to help the GoD prepare a digital economy strategy** with a holistic, gender- and climate-sensitive approach that would foster productive uses of internet in the economy and society, with due attention to cybersecurity and data protection issues;

i) **Training sessions and capacity building programs for senior government officials, including women, on digital transformation and its role in mitigating the effects of climate change..**

20. **The development of a more enabling digital environment will boost the resilience of vulnerable sectors (such as agriculture) and segments of the population in many ways.** These include: (i) improving public sector capacities and programming for public services that mitigate risk or impact and boost resilience, such as disaster risk monitoring and management, (ii) providing an enabling environment for natural resource management, education reform, digitized public sector transfer schemes or the further development of digital payment systems.

Sub-component 1.2: Digital connectivity (US$6.0 million, of which US$5.0 million IDA and up to $1.0 million in private capital mobilization)

21. **This sub-component seeks to increase the GoD's capacity to deliver services to the public sector and to improve broadband connectivity for education services and private sector.** In particular, high priority would be accorded to providing broadband connectivity to primary schools and possibly other institutions of the education system (colleges, secondary schools, TVETs etc.) to improve students and teachers' access to the internet. Currently, some two-thirds of the country's 152 primary schools are completely unconnected to the internet.

22. **By extending connectivity to the fixed network of some government entities, including schools, this sub-component will enhance Djibouti's ability to respond to and recover from COVID-19, as well as future shocks.** The importance of national efforts using technology to support distance learning and education has been heightened during the COVID-19 pandemic and is a key tool to building resilience in the system and promoting learning continuity in response to natural disasters or climatic shocks, which can cause further

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[38] A study commissioned in 2017 by Djibouti Telecom suggests a very high level of internet penetration (55.7 percent of the population) which is out of line with other estimates, and the methodology used was doubtful; hence the need for a new study.

[39] The World Bank is undertaking a mid-term review of the SSI as part of the technical assistance delivered in the telecom sector reform ASA (P171784).

disruptions to schooling. Training new generations in digital technologies and creating the solid foundations of a digital economy is also critical. Lastly, enhanced connectivity will allow the establishment of systems that can monitor, warn of and respond to climatic events. COVID-19 has demonstrated the criticality of connectivity to monitor, manage and rein in outbreaks, which may become increasingly frequent due to climate change.

23.   **The efforts under sub-component 1.2 to improve connectivity are meant to tap into the strategy of gradually opening up the broadband market (as supported by sub-component 1.1) and will specifically focus on education and other public institutions.** The project will seek to stimulate private investment by leveraging the GoD's demand for internet services as an anchor tenant to mobilise PCM, while providing the GoD and MENFOP with timely TA / lessons sharing for acquiring low cost internet services. The value of private investment leveraged through the project will be tracked through an intermediate indicator. The proposed implementation mechanism to be used is the pre-purchase of internet capacity, with aggregation of demand according to a phased approach, beginning with a pilot phase, related to the current level of market liberalization. The first pilot phase will involve working with the Ministry of Education and Professional Development (MENFOP) on a number of selected schools[40] that already have a fiber connection to test the expansion of broadband capacity, through pre-purchase schemes, and learning from the experience to develop a more holistic school connectivity plan, which would also span operations and maintenance (O&M) costs[41] and teacher training. Sub-component 1.2 will also support the MENFOP strategic plan for Strengthening ICT Education and Learning (*Schéma Stratégique de Renforcement des Enseignements-Apprentissage par les TIC, REATIC*) leveraging private sector participation. The following activities will be supported under this sub-component:

> **Sub-component 1.2. a) Pilot phase** (US$0.5 million)

24.   **The pre-purchase of internet capacity in the pilot phase will be undertaken as part of a short-term contract (2/3 years) with DT or Afrifiber** (the two currently licensed operators), or other newly-licensed operators. The pilot phase would be free of any disbursement conditions, as it is essentially a proof of concept. The pre-purchase of internet on behalf of the GoD would complement, but not duplicate, the existing Government program, being undertaken by DT, which aims to provide a physical fiber optic internet connection for schools (i.e. DT would cover the fixed investment costs whereas the project would cover the usage costs). As part of this pilot, the MENFOP will benefit from technical expertise and sharing of best practices on innovative connectivity arrangements (e.g., pre-purchase arrangements, maintenance, etc.) – which in turn will inform a more robust school connectivity plan. The number of girls and boys benefitting from enhanced connectivity in these schools will be tracked separately.

> **Sub-component 1.2. b) Implementation phase** (US$4.5 million IDA and around US$1.0 million in private capital mobilization)

25.   **Sub-component 1.2 will strengthen national digital connectivity infrastructure and trigger new private sector-led investment**. The objective is to diversify infrastructure provision rather than relying solely on DT's

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[40]Unconnected educational establishments includes 67.1% Primary Schools, 23.1% Colleges and 19.2% Lycees.

[41] Costs related to the maintenance and operation of the telecom transmission services to schools.

network, and thereby expand the coverage of fixed telecommunications services, support the introduction of improved connectivity services to selected government buildings, and allow to set tariffs based on the availability of competitive offers within the nascent competitive telecommunications market. The competitive tender for the provision of telecommunications services to targeted government buildings, which will require resilient fiber-based infrastructure, will be opened to at least one private sector operator, in addition to DT, to allow for a competitive selection. The suitable private sector operator should have mobilized its own private capital, or be prepared to do so, to deploy a modern fiber-based network architecture. The winning bidder(s) will receive payments under a service contract with GoD, for a minimum of five years, using project funds, and against achievementof specified time-bound performance and service delivery milestones. To the maximum extent possible, future operations and maintenance costs should be anticipated and covered in the bidding process, though these may not surpass the planned closing date of the project. The project will further discuss with GoD to anticipate in the national budget the necessary lines to cover the O&M activities after project closure.

Component 2: Digital transformation and skills development (US$2.0 million)

26. **This component aims to capitalize on the gradual opening to competition and the additional digital connectivity which supported under Component 1 to promote digital transformation and the development of digital skills, which are both needed for productive use of the Internet.** It will seek to promote digital skills through increased digital literacy and inclusion, and support the digital economy by stimulating the development and use of digital solutions[42]. Two groups of beneficiaries will be targeted: i) the general population, with a focus on women[43] and youth; and ii) entrepreneurs and MSMEs. The following two sub-components will be supported:

Sub-component 2.1. Digital Skills for the general population (US$1.0 million)

27. **This sub-component will seek to provide basic digital skills to the general population**. To that end it will work with schools (provided with enhanced connectivity[44] under Sub-component 1.2) and existing national platforms such as Community Development Centers (CDCs), for which connectivity could be supplied if needed, the Center for Leadership and Entrepreneurship (CLE), and the Center for Technology and Innovation for Development (CTID). Sub-component 2.1 will support the following TA activities:

Developing a framework to increase the availability of digital skills in Djibouti

a) **Definition and assessment of digital skills and proficiency levels**. A national framework will be created to define digital skills and proficiency levels, in alignment with international standards such as the European Union (EU)'s Digital Competence Framework (DigComp)[45]; based on this framework a

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[42] This would help diversify the economy away from traditional sectors and industries, helping uncouple Djibouti from substantial climate risks.

[43] Section C and Annex 6 of the PAD discuss in more detail how the project will contribute to addressing identified barriers in gender equality in the digital sector in Djibouti.

[44] In the project context, this implies schools and other organisations that benefit from additional internet capacity under the project (e.g., higher speeds, subsidized prices etc).

[45] https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework.

baseline assessment of digital skills will be conducted. The analysis will be used to measure the project's contribution to the improvement of these skills, and to assess different dimensions of the digital skills divide, e.g. gender, age, education, and urban/rural split;

b) **Collaboration with the educational sector to integrate basic digital skills in school curricula**. In this regard, resorting to free services such as Code.org's Hour of Code Activities[46] could be particularly useful.

Enhancing digital skills amongst the population of Djibouti

a) **Digital literacy courses for the general population**. In-person courses, with an emphasis on women and young people, and in partnership with the private sector[47], will be designed to enhance basic digital literacy capabilities[48].These courses will be advertised through print media, social media, and TV and radio programming, and by conducting awareness workshops and seminars for the media, school administrators, community leaders, and the general public[49]. To complement in-person training, an established online learning platform (e.g., Coursera, Udemy) could be used for continued learning and engagement, and to mitigate potential social distancing measures stemming from COVID-19 and other crises, including climate-induced ones;

b) **Training for potential "digital champions"** who can impart digital skills and raise cybersecurity awareness at the community level.

Sub-component 2.2. Digital skills for entrepreneurs and MSMEs (US$1.0 million)

28. **The project will also support intermediate and advanced digital skills programs for entrepreneurs and MSMEs**. This activity will aim to strengthen digital skills across MSMEs, including cybersecurity skills and awareness. It will seek to complement other ongoing skills development activities in the WBG portfolio and support the development of an ecosystem that helps traditional (or "offline") MSMEs adopt digital technologies and technology-based business models that would improve efficiency and create market-relevant products and services[50], thereby contributing to broadening and deepening the transformation of the digital economy. Such transformation will further bring innovation, economic growth, jobs and ultimately a diversification of income streams to the country, building resilience to adverse shocks, including from climate change. This digital transformation will also help Djiboutian MSMEs expand their services beyond borders and link into the regional and global economy, and develop solutions to greening the economy and increasing the country's resilience to shocks. The supported TA activities include:

a) **A baseline assessment of intermediate and advanced digital skills across MSMEs,** based on the national competence framework (supported under subcomponent 2.1). The assessment will measure the project's contribution to the improvement of these skills, and evaluate different dimensions such as industry sector, gender, age, education, and urban/rural split;

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[46] https://code.org/learn.

[47] The private sector could, for instance, provide high-quality content to be used in these training courses.

[48] Such as computer literacy, Internet literacy, online searching, Web browsing, email and social media literacy.

[49] The awareness campaigns will be enhanced by putting digitization in the context of climate change and highlighting its role in increasing climate resilience.

[50] For example, digital payments could be linked to public transfer schemes to allow for the targeted distribution of aid in short time; people could receive public health alerts or other disaster warnings; small-scale farmers would be able to monitor weather and natural resources and track market prices, and it would become possible to perform health monitoring and contact tracing during outbreaks such as COVID-19.

b) **Intermediate and advanced digital courses**[51] for MSMEs and entrepreneurs to enable them to achieve their digital transformation and/or create innovative, market-relevant products. MSMEs will be targeted based on a list compiled by the Chamber of Commerce, and these courses will be advertised through awareness workshops and seminars for MSMEs and the media. In line with the Private Capital Mobilization (PCD) approach, public-private partnerships will be promoted for the agile and innovative delivery of digital skills training, and to more effectively link the supply of new skills to market demand[52]. Digital courses will be specifically tailored for women-led MSMEs and female entrepreneurs;

c) **Creation of a virtual coding academy**, with regional and international links[53], that will teach market-relevant coding and soft skills to women, youth, and entrepreneurs and help place them in local and international firms;

d) **Formation of a group of mentors and advisors** that will help entrepreneurs and MSMEs identify suitable training opportunities, and coach them on best practices for digital transformation and business growth. The project will strive to work with female mentors and advisors to help female entrepreneurs overcome social norms and gender barriers.

Component 3: Project Management (US$1.0 million)

29.   This component covers the Borrower's costs of implementing and managing the project, including the staff and operational costs (such as office supplies, computers and softwares) associated with procurement, financial management, communications, safeguards, monitoring and evaluation (M&E), overall project coordination, and citizen engagement (CE). For the latter, it is proposed to use the Geo-Enabling Initiative for Monitoring and Evaluation (GEMS). Dedicated results indicators related to consultations and to handling of grievances will be used to track the level of CE.

Component 4: Contingent Emergency Response Component (CERC) – (US$0.0)

30.   Following the global shock generated by the COVID-19 pandemic, it has become common practice for all WB lending projects to incorporate a Contingent Emergency Response Component (CERC). This will have an initial zero allocation but may be financed during project implementation to allow for an agile response to unforeseen emergencies. This provides for flexibility to respond to eligible crises as they arise. These could include, for instance, humanitarian crises which require the provision of emergency communications services to replace facilities that have been damaged, or to facilitate emergency humanitarian payments using mobile money. A section in the project implementation manual (PIM) will be developed by project effectiveness, prescribing the conditions and modalities for use of the CERC.

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[51] Such as e-commerce, e-procurement, fintech, data analytics, cloud-based platforms, advanced digital marketing, software development, and new technologies.

[52] For example, courses could be developed in cooperation with existing entrepreneurial support organizations such as CLE and CTID, which could offer their physical space and resources to teach these specialized skills.

[53] Regional and international private-sector partners could provide the content, course delivery, and/online teaching platform.

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

Summary of Assessment of Environmental and Social Risks and Impacts

Although no civil works are planned under the project, environmental and social risks include the generation of electronic hazardous wastes, the risk of elite capture, the potential for excluding vulnerable and disadvantaged groups and individuals from accessing project benefits, the risk of exposure or propagation of SARS-Cov-2 during the implementation of activities, both in terms of community exposure and exposure of project workers, and risks associated with labor conditions and the protection of the labor force. Given that the risks are site-specific, low in magnitude and easily mitigated in a predictable manner, the environmental and social risks of the project are rated moderate.

E. Implementation

Institutional and Implementation Arrangements

31.   The line Ministry (MCPT) will be playing a leading role in the overall guidance and oversight of the project. A new Project Implementation Unit (PIU) will be established, at the MCPT, but given that the Ministry has no prior experience in managing WB-financed operations, the project will initially rely on skilled resources from an existing project for a transitional period, apecificall the PIU for the Public Administration Modernization Project (PAMAP) (P162904), hosted by ANSIE, the Information Society Agency within the Office of the President. PAMAP's PIU, which comprises procument, financial management, safeguards and monitoring and evaluaton specialists, has considerable experience in implementing Bank financed projects. In May 2021, MCPT signed an agreement with ANSIE for the secondment of fiduciary and procurement specialists for the two first years of the project. ANSIE is also a reliable partner as it has good knowledge of WB internal policies and procedures, including the use of Systematic Tracking of Exchanges in Procurement (STEP), the WB procurement tracking system, and has overall responsibility for accelerating the process of modernizing the public administration through the use of ICTs and is well placed to share information and coordinate with all stakeholders in the ecosystem. Furthermore, ANSIE will also be a key beneficiary of the proposed project.

32.   As several institutions are directly involved with the activities to be carried out, the project will require an effective mechanism for inter-institutional coordination and implementation.
   a.   A project steering committee (PSC) will be established, supported by two technical committees (TC), one for each of components 1 and 2. The PSC will be chaired by MCPT and would include representatives from the beneficiary ministries including MEFIP, ANSIE, MENFOP, and the multi-sector regulator ARMD, with the objective of providing strategic direction of the project;
   b.   The technical committee(s) will be chaired by MCPT and would additionally include representatives of the incumbent operator as well as the private sector and civil society and allow for private sector consultation with objective of providing technical advice. The project team will also discuss with

the GoD the idea of creating an NGO/CSO working group that can serve as a sounding board for this project and others in the portfolio. Ideally, upon the project's completion, it could serve as a supplemental interface for government-citizen interaction, for instance on the digital strategy and action plan;

c.   The PIU anchored with MCPT will include a project coordinator, financial and procurement specialists, and a dedicated focal point for environmental and social safeguards;

d.   A simple Terms of Reference (ToR) for the steering and technical committees clarifying their roles and responsibilities, frequency of meetings, and expected outputs will be part of the project implementation manual (PIM), which will be ready by project effectiveness. A brief summary of meetings will be provided to WB team for information purposes.

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