

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**DOMINICAN REPUBLIC**

**PROGRAM TO IMPROVE CONNECTIVITY FOR DIGITAL TRANSFORMATION IN  
THE DOMINICAN REPUBLIC**

**(DR-L1147)**

**LOAN PROPOSAL**

This document was prepared by the project team consisting of: Antonio García-Zaballos (IFD/CMF), Project Team Leader; Pau Puig Gabarró (IFD/CMF), Alternate Project Team Leader; Enrique Iglesias Rodríguez, Claudia Marquez, and Fanny Porras (IFD/CMF); Juan Vieyra (IFD/ICS); Geovana Acosta (IFD/CTI); Jacqueline Bueso (SPD/SDV); Alvaro Sanmartín (LEG/SGO); Denise Salabie and Romina Kirkagacli (VPC/FMP); María Villanueva (SCL/GDI); Yonaida Encarnación (CID/CDR); Giovanni Frisari and Benoit Lefevre (CSD/CCS), and Maria Cecilia Ramírez and Tomas Serebrisky (INE/INE).

In accordance with the Access to Information Policy, this document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. This document has not been approved by the Board. Should the Board approve the document with amendments, a revised version will be made available to the public, thus superseding and replacing the original version.

## CONTENTS

### PROJECT SUMMARY

I.	DESCRIPTION AND RESULTS MONITORING.....	1
A.	Background, problem addressed, and rationale.....	1
B.	Objectives, components, and cost.....	9
C.	Key results indicators .....	11
II.	FINANCING STRUCTURE AND MAIN RISKS.....	12
A.	Financing instruments .....	12
B.	Environmental and social risks .....	13
C.	Fiduciary risks .....	13
D.	Key issues.....	13
III.	IMPLEMENTATION AND MANAGEMENT PLAN .....	14
A.	Summary of implementation arrangements .....	14
B.	Summary of arrangements for monitoring results .....	17

## APPENDICES

Proposed resolution

ANNEXES	
Annex I	Summary Development Effectiveness Matrix
Annex II	Results Matrix
Annex III	Fiduciary Agreements and Requirements

LINKS
<b>REQUIRED</b> <ol style="list-style-type: none"><li>1. <a href="#">Multiyear execution plan</a></li><li>2. <a href="#">Monitoring and evaluation plan</a></li><li>3. <a href="#">Procurement plan</a></li></ol>
<b>OPTIONAL</b> <ol style="list-style-type: none"><li>1. <a href="#">Project economic analysis</a></li><li>2. <a href="#">Digital transformation targets and challenges in the Dominican Republic</a></li><li>3. <a href="#">Program Operating Regulations</a></li><li>4. <a href="#">Climate change strategy</a></li><li>5. <a href="#">Minimum subsidy bidding system</a></li><li>6. <a href="#">Technical considerations and definition of target area</a></li><li>7. <a href="#">Analysis of compliance with the Public Utilities Policy (document GN-2716-6)</a></li><li>8. <a href="#">Safeguard Policy Filter and Safeguard Screening Form</a></li></ol>

## **ABBREVIATIONS**

ETED	Empresa de Transmisión Eléctrica Dominicana
GDP	Gross domestic product
ICB	International competitive bidding
ICTs	Information and communications technologies
INDOTEL	Instituto Dominicano de las Telecomunicaciones [Dominican Telecommunications Institute]
ITU	International Telecommunication Union
OECD	Organisation for Economic Co-operation and Development
OPTIC	Oficina Presidencial de Tecnologías de la Información y Comunicación [Presidential Information and Communications Technology Office]
ONE	Oficina Nacional de Estadística [National Statistics Office]
SIUBEN	Sistema Único de Beneficiarios [Consolidated Beneficiary System]
STEM	Science, technology, engineering, and mathematics
WEF	World Economic Forum

## PROJECT SUMMARY

### DOMINICAN REPUBLIC

#### PROGRAM TO IMPROVE CONNECTIVITY FOR DIGITAL TRANSFORMATION IN THE DOMINICAN REPUBLIC (DR-L1147)

Financial Terms and Conditions				
Borrower:			Flexible Financing Facility <sup>(a)</sup>	
Dominican Republic			Amortization period:	25 years
Executing agency:			Disbursement period:	5 years
Dominican Telecommunications Institute (INDOTEL)			Grace period:	6.1 years <sup>(b)</sup>
Source	Amount (US\$)	%	Interest rate:	LIBOR-based
IDB (Ordinary Capital):	115 million	100	Credit fee:	(c)
			Inspection and supervision fee:	(c)
Total:	115 million	100	Weighted average life:	15.25 years
			Approval currency:	U.S. dollar
Project at a Glance				
<b>Project objective/description:</b> The general objective is to increase the level of digitalization for the people of the Dominican Republic in order to step up access to digital services and the adoption and continuity of those services. To that end, the project's specific objectives are: (i) to improve national connectivity by investing in digital infrastructure and improving broadcasting service; and (ii) to build digital skills and competencies while incorporating a gender perspective.				
<b>Special operational contractual conditions precedent to the first disbursement of the loan proceeds:</b> Before the first disbursement of the loan proceeds, the executing agency will have submitted evidence that: (i) it has signed a subsidiary agreement with the Ministry of Finance for the transfer of resources and program execution in accordance with the terms and conditions previously agreed upon with the Bank; (ii) it has established a program management unit and recruited or designated, as the case may be, key personnel for that unit (a program director, a procurement specialist, and a financial specialist); and (iii) the <a href="#">program Operating Regulations</a> have been approved in accordance with the terms and conditions previously agreed upon with the Bank (paragraph 3.5).				
<b>Exceptions to Bank policies:</b> None.				
Strategic Alignment				
Challenges: <sup>(d)</sup>	SI <input checked="" type="checkbox"/>		PI <input checked="" type="checkbox"/>	EI <input type="checkbox"/>
Crosscutting themes: <sup>(e)</sup>	GE <input checked="" type="checkbox"/> and DI <input type="checkbox"/>		CC <input checked="" type="checkbox"/> and ES <input type="checkbox"/>	IC <input checked="" type="checkbox"/>

- (a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, and commodity conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.
- (b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.
- (c) The credit fee and the inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with applicable policies.
- (d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).
- (e) GE (Gender Equity) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problem addressed, and rationale

- 1.1 **Macroeconomic situation in the Dominican Republic.** The Dominican Republic's economy grew at an annual rate of 5.2% in real terms in the 2009-2019 period, well above the average for Latin America and the Caribbean (1.6%). In 2020, the country's gross domestic product (GDP) shrank by 6.7% as a consequence of the COVID-19 pandemic and the measures taken to hold it in check. Projections point to a faster recovery in 2021 than the rest of the region, with the country's GDP growth rate estimated at 5% to 6%. The crisis drove up the broad unemployment rate from 10.8% in 2019 to 14.9% in 2020. Overall poverty climbed by 2.4 percentage points, rising from 21% to 23.4% in 2020, but the level of inequality declined slightly, with the Gini Index edging down from 0.431 in 2019 to 0.405 in 2020 thanks to the cash transfers implemented to support the population during the crisis.<sup>1</sup>
- 1.2 **Empirical evidence of the importance of broadband during the COVID-19 pandemic.** By Resolution 62-20 of 19 March 2020, Congress authorized the President of the Dominican Republic to declare a nationwide state of emergency, which was formally instituted via Decree 134-20, so that measures aimed at containing the outbreak of COVID-19 could be implemented.<sup>2</sup> The COVID-19 pandemic has underscored the importance of affordable access to telecommunications services. Broadband access has facilitated the implementation and continuity of public services, consumption, and production, saving an estimated 20% to 25% of GDP during the periods when movement was restricted.<sup>3</sup> The positive impact of broadband during the COVID-19 pandemic corroborates the findings of an earlier econometric study on the economic impact of the severe acute respiratory syndrome-associated coronavirus (SARS-CoV) in 2003, which showed that countries with better broadband infrastructure were able to counter the negative impacts of the pandemic. According to that study,<sup>4</sup> countries with developed connectivity infrastructure succeeded in mitigating 75% of the economic losses from the severe acute respiratory syndrome (SARS) epidemic and the socioeconomic impact of the health measures taken to curb it (quarantines, social distancing, the shutdown of air traffic, use of masks, etc.). These crises have also shown that, for the population to benefit from Internet use, not only do telecommunications networks need to be deployed to small towns and other settlements, but people also need to develop basic digital skills.
- 1.3 **Legal, institutional, and public policy framework.** Major components of the legal framework include: (i) the Telecommunications Act (Law 153-98) of 1998.<sup>5</sup>

---

<sup>1</sup> [Estadísticas Oficiales de Pobreza Monetaria 2020](#). Ministry of Economy, Planning, and Development. 2021.

<sup>2</sup> [Government Decree 148-20](#).

<sup>3</sup> [The Impact of Digital Infrastructure on the Consequences of COVID-19 and on the Mitigation of Future Effects](#). Inter-American Development Bank (IDB). 2020.

<sup>4</sup> [El Estado de la Digitalización de América Latina frente a la Pandemia COVID-19](#). Andean Development Corporation (CAF).

<sup>5</sup> [Telecommunications Act \(Law 153-98\)](#).

The limitations of this law in such areas as the sharing of infrastructure and the radioelectric spectrum do not impinge on the program's design.<sup>6</sup> The program is consistent with the objectives and purposes of this law, and no changes that would invalidate the program are foreseen; and (ii) recent Executive Order 539-20,<sup>7</sup> which issues mandates for the implementation of sector policies in the short and medium terms and enshrines the fundamental right of universal access to the latest-generation broadband Internet service and the productive use of information and communications technologies as vital to the national interest. Important actors in the institutional framework include: (i) the Dominican Telecommunications Institute (INDOTEL), which is the independent regulatory agency for the sector and is responsible for formulating and coordinating a national broadband plan and designing public policies and regulations to promote the supply of telecommunications services and universal access to those services;<sup>8</sup> (ii) the Presidential Information and Communications Technology Office (OPTIC), which is responsible for planning, directing, and implementing e-government services in the country;<sup>9</sup> and (iii) the electricity transmission company Empresa de Transmisión Eléctrica Dominicana (ETED), whose Fiber Optics Telecommunications Business Unit (UNTFO) manages the public telecommunications infrastructure.<sup>10</sup> The Bank is providing technical cooperation funding to support the development of the country's broadband plan through a public-private partnership (paragraph 1.11).

- 1.4 **Sectoral context.** Fewer than 10% of rural households in the Dominican Republic have a fixed Internet connection. The World Economic Forum (WEF) has given the country a score of 3.6 out of 7 in the area of digital skills, putting it in 111th place worldwide.<sup>11</sup> On the Broadband Development Index (2020), the country ranks 52nd out of the 65 countries analyzed.<sup>12</sup> The analog-to-digital switchover<sup>13</sup> is a fundamental step in speeding up Internet access and adoption because it frees up bandwidth, leading to more efficient use and thus expediting the deployment of digital services.<sup>14</sup> Foreign direct investment in the telecommunications sector over the past decade has totaled more than US\$1 billion and accounts for around 4% of the country's total foreign direct investment for that period.<sup>15</sup> Yet despite this investment effort, the Dominican Republic's telecommunications sector suffers from some significant shortcomings. The heavy concentration of the population in

---

<sup>6</sup> The Dominican Republic ranks 85th out of 141 countries (3.4 points on a 7-point scale) for the legal framework's adaptability to digital business models in the 2019 edition of the WEF's [Global Competitiveness Report](#).

<sup>7</sup> [Executive Order 539 20](#).

<sup>8</sup> [Executive Order 539 20](#).

<sup>9</sup> [OPTIC](#). 2021.

<sup>10</sup> [ETED](#). 2021.

<sup>11</sup> [The Global Competitiveness Report 2019](#). WEF.

<sup>12</sup> [Broadband Development Index](#). 2020. IDB. The index measures the digital divide in the region by analyzing 47 variables/indicators that influence the development of broadband service in each country.

<sup>13</sup> Changes in technology and infrastructure required to transition from analog to digital broadcasting.

<sup>14</sup> For further details, see [Contexto de Conectividad en República Dominicana](#) and [Contexto Institucional de República Dominicana](#).

<sup>15</sup> [Flujos de la IED por Actividad Económica](#). Central Bank.

urban areas, combined with the fact that the rest of the population is widely scattered throughout the country's rural areas, is one of the challenges to be overcome in order to provide universal access to broadband service. Some 75% of the population (7 million) is concentrated in the 35 municipios that have populations of over 50,000, while the other 25% (2.5 million) is spread out across 120 municipios.<sup>16</sup> Mobile telephone and Internet services in the Dominican Republic are dominated by a duopoly, with Claro's and Altice's market shares amounting to 60.5% and 33.9% of the former and 60.23% and 26.1% of the latter, respectively.<sup>17</sup> The cost of these services is quite high for persons of limited means, with fixed broadband and mobile broadband services amounting to up to 10% and 3%, respectively, of the monthly incomes of the lowest earning 40% of the population. These services are therefore less affordable in the Dominican Republic than they are, on average, in the countries of the Organisation for Economic Co-operation and Development (OECD) (2% and 2%) (optional link 2, [digital transformation targets and challenges in the Dominican Republic](#)).<sup>18</sup>

- 1.5 **Ongoing challenges.** Inequality and poverty rates are consistently higher in geographic areas with less broadband coverage<sup>19-20</sup> (see optional link 2, [digital transformation targets and challenges in the Dominican Republic](#)). The lack of public connectivity services and goods has a direct impact in limiting the level of digitalization, the population's access to digital services, and the adoption and continuity of those services. The literature shows that improving the deployment of infrastructure has a direct impact on development<sup>21</sup> and contributes to the achievement of the Sustainable Development Goals.<sup>22</sup> According to the International Telecommunication Union (ITU), 74% of the Dominican Republic's population uses the Internet,<sup>23</sup> as compared to 83% in OECD countries.<sup>24</sup> The limited access of the Dominican Republic's population to fixed and mobile broadband service is the overarching problem that this project has identified and will help to address. This problem stems from the following specific issues:

---

<sup>16</sup> 2010 census. National Statistics Office (ONE).

<sup>17</sup> [Telegeography](#). 2020.

<sup>18</sup> [Broadband Development Index](#). 2020. IDB.

<sup>19</sup> The correlation coefficient between per capita GDP and broadband penetration in the municipios of the Dominican Republic is 0.481059. 2010 census. ONE.

<sup>20</sup> In urban areas, 22.6% of the population has Internet access, whereas only 6.4% of the rural population does. Multipurpose Household Survey 2013. ONE.

<sup>21</sup> A. Hofman et al. Information and Communication Technologies (ICTs) and Their Impact in the Economic Growth of Latin America 1990-2013. 2016; Telecommunications Policy, volume 40; and M. Cimoli et al. Innovation and Economic Development: The Impact of ICTs in Latin America.

<sup>22</sup> A 1% increase in telecommunications coverage helps to lower the poverty rate by 0.0132 of a percentage point. Antonio García-Zaballos, Enrique Iglesias, and Alejandro Adamowicz. 2019. [The Impact of Digital Infrastructure on the Sustainable Development Goals](#). IDB.

<sup>23</sup> This figure corresponds to active Internet users (from any device) in the past three months. Definition of indicators. ITU.

<sup>24</sup> [DigiLAC](#). 2020. IDB.



- (i) limited spectrum assignment and digital connectivity infrastructure;<sup>25-26</sup> and
- (ii) the low level of digital skills, which includes a gender divide.

1.6 **Limited spectrum assignment and digital connectivity infrastructure.** The penetration rates for fixed broadband (7.5%) and mobile broadband (61%) are far below those of the OECD (33.7% and 121.1% respectively),<sup>27</sup> and 95.3% of the country's landmass either has very low fixed broadband coverage or lacks it entirely. This is mainly because operators aggregate traffic in a backbone network and then deploy access networks only where it is economically profitable for them to do so, resulting in infrastructure gaps in rural and remote areas. Urban-rural infrastructure divides lead to inequalities that may drive out-migration from rural areas, given the empirical evidence of the link between migration and underemployment. Hence there is a need for public-private action to promote universal access. The limited infrastructure is also due to the fact that the analog-to-digital switchover has not yet occurred, for mobile broadband requires fixed infrastructure. Since analog television signals use much more bandwidth than digital television signals, this transition will free up a large part of the spectrum that is highly valuable for the deployment of mobile broadband. Therefore, the switchover will free up part of the spectrum, expedite the deployment of fixed and mobile 4G and 5G infrastructure, and help to upgrade the quality of digital and broadcasting services by increasing the available bandwidth.<sup>28</sup> In view of the fact that the increased availability and assignment of portions of the radioelectric spectrum will help upgrade broadband service, 100 blocks of 700 megahertz and 3.5 gigahertz spectrum bands were put up for auction on 9 February 2021. In addition to paving the way for the rollout of 5G solutions, this will also expedite the transition from analog to digital television.<sup>29-30</sup> Figure 1 shows the municipal district capitals that have backbone coverage, while Figure 2 depicts the municipios where coverage is provided by last-mile networks. Together, these maps attest to the fact that there is less connectivity infrastructure in place in more remote municipios. The causal factors of this are: (i) insufficient connectivity infrastructure;<sup>31</sup> (ii) insufficient international connectivity infrastructure; (iii) underdevelopment of human capital in digital infrastructure; and (iv) suboptimal efficiency in broadcasting service owing to limited spectrum access. These factors adversely impact the country's socioeconomic development.<sup>32</sup>

---

<sup>25</sup> [DigiLAC](#). The Dominican Republic ranks 52nd out of 65.

<sup>26</sup> [United Nations e-Government Knowledgebase](#). The Dominican Republic is ranked 82nd out of 193 countries.

<sup>27</sup> Broadband Development Index, 2020. IDB.

<sup>28</sup> [ITU-R FAQ on the Digital Dividend and the Digital Switchover](#). ITU. 2020.

<sup>29</sup> For further details, see this [link](#).

<sup>30</sup> Decree 539-20 calls for the analog-to-digital switchover to take place before the end of 2022.

<sup>31</sup> 4G and 5G transmit huge amounts of data at high speeds, which requires significant wireless (spectrum) and fixed (fiber optics) resource capacities.

<sup>32</sup> A. Hofman. ICTs and Their Impact in the Economic Growth of Latin America 1990-2013. 2016 Telecommunications Policy.

**Figure 1. Backbone and last-mile networks in the country's municipios (light blue)<sup>33</sup>**

**Figure 1. Municipal district capitals with backbone network coverage**



**Figure 2. Municipios with last-mile network coverage**



Source: INDOTEL. 2021.

- 1.7 **Low level of digital skills and the gender divide.** The lack of digital skills could exacerbate the fallout from COVID-19 by hampering the adoption of information and communications technologies (ICTs). The WEF has given the Dominican Republic a score of only 3.6 points out of 7 for digital skills among the active population on the Global Competitiveness Index, which puts the country in 111th place out of 141 countries.<sup>34</sup> Yet public schools' and other educational institutions' efforts to upgrade the active population's digital skills may take a long time to yield tangible results, since much of that effort targets children and young people who will not become part of the active population for some time.<sup>35</sup> Indicators also point to a significant gender divide in this area. The dearth of formal instruction in digital technologies among women is particularly glaring, as only 2.2% of women graduate from ICT programs (well below the 6.6% in the case of men).<sup>36-37</sup> The gender inequity apparent in this type of training is reflected in employability, as there are twice as many unemployed women as men,<sup>38</sup> and this stands out even more clearly in the case of the segment of the population living in poverty. The challenges faced by women in terms of employability have become even more severe during the pandemic, as 61.6% of women workers are employed in sectors that have been affected by lockdowns.<sup>39</sup> The gender gap in the skills needed to make use of digital technologies (e.g., online financial services, online education, remote work) translates into other types of gender gaps. The Dominican Republic's WEF score for gender parity is 0.7 on a scale where 1 is full parity, putting it in

<sup>33</sup> Operators deploy infrastructure in areas where it is economically profitable for them to do so, leaving rural areas underserved.

<sup>34</sup> [The Global Competitiveness Report](#). 2019. WEF.

<sup>35</sup> The Ministry of Education is promoting [online education](#) and [training for teachers in the instructional application of ICTs](#).

<sup>36</sup> [The Global Gender Gap Report](#). 2020. WEF.

<sup>37</sup> The gap is even wider in the fields of science, technology, engineering, and mathematics (STEM). Only 7% of female students (versus 20% of their male counterparts) have graduated with STEM degrees. [Human Development Indicators](#). 2020. United Nations Development Programme.

<sup>38</sup> [Human Development Indicators](#). 2020. United Nations Development Programme.

<sup>39</sup> [Economic Commission for Latin America and the Caribbean \(ECLAC\)](#). 2020.

86<sup>th</sup> place out of 153 countries, and its scores are particularly low in the area of economic participation and opportunities.<sup>40</sup> The main reasons for this are: (i) the limited level of digital training;<sup>41-42</sup> and (ii) the low level of ICT training and certification among women. Improvements in these areas would have a socioeconomic impact.<sup>43</sup>

- 1.8 **Climate commitments and vulnerability to natural disasters.** The geographic features of the Dominican Republic and the variability of its weather patterns heighten the risk of more frequent and intense weather events such as hurricanes, tropical storms, flooding, droughts, forest fires, tornados, and hailstorms (see optional link 4, [climate change strategy](#)). Between 1871 and 2018, the Dominican Republic was hit by over 100 tropical cyclones and, in recent years (1996-2015), it has been one of the countries that has been the most severely affected by climate change according to the Global Climate Risk Index.<sup>44</sup> Its vulnerability is expected to increase significantly, with projections indicating that it will move from a “moderate vulnerability” rating (as of 2010) to the “high vulnerability” category by 2030.<sup>45</sup> In order to address this systemic vulnerability to climate change, the Dominican Republic is employing a range of national instruments to promote a crosscutting reduction in vulnerability and an improvement in adaptation processes in key sectors, including infrastructure. The country is also committed to reducing its greenhouse gas emissions. In its nationally determined contribution submission to the United Nations Framework Convention on Climate Change (UNFCCC), the country pledges to cut its greenhouse gas emissions by 27% by 2030 (relative to the business-as-usual scenario). Energy efficiency and energy conservation are a pillar of the strategy for reaching this target.<sup>46</sup> Consequently, the expansion of digital infrastructure and the efficient use of the spectrum can contribute to this national effort, as long as the equipment used is energy-efficient and resilient to climate change and the country’s geophysical hazards.
- 1.9 **Bank support for the sector.** The Bank has provided multidimensional support in the form of: (i) updates to public policy and regulatory frameworks through the Program for Strengthening the Digital Agenda: Connectivity, Electronic Government, and Digital Productive Transformation (loan [4755/OC-AR](#)) in Argentina; the Program to Improve the Connectivity and Digitalization of the Economy (loan [4701/OC-CO](#)) in Colombia; and the Public Policy Support Program

---

<sup>40</sup> [The Global Gender Gap Report](#). 2020. WEF.

<sup>41</sup> The second-most frequently cited reason (24%) by respondents for not using the Internet was that they did not know how to use it, according to the 2015 Multipurpose Household Survey. [Derechos en Línea de la Mujer – Reporte de Calificaciones en la República Dominicana](#). 2017. World Wide Web Foundation.

<sup>42</sup> The Dominican Republic’s score on the “Internet access in schools” variable of the Broadband Development Index (1.6 out of 7) was below the regional average (2.9 out of 7).

<sup>43</sup> [The Impact of Digital Infrastructure on the Consequences of COVID-19 and on the Mitigation of Future Effects](#). IDB. 2020.

<sup>44</sup> The Long-Term Climate Risk Index. [GermanWatch](#). 2017

<sup>45</sup> DARA Climate Vulnerability Monitor, 2012.

<sup>46</sup> [Nationally determined contribution of the Dominican Republic](#). 2020.

for the New Economy (loan [4985/OC-PR](#)) in Paraguay; and (ii) support for the deployment of digital infrastructure under the Broadband Program (loan [3612/BL-NI](#)) in Nicaragua, the Digital Agenda Support Program (loan [4650/OC-PR](#)) in Paraguay, the Digital Transformation for Increased Competitiveness Program (loan [4942/BL-HO](#)) in Honduras, and a conditional credit line for investment projects (operation [ME-O0004](#)) with the Program for the Financing of the Shared Telecommunications Network (loan [4666/OC-ME](#)) in Mexico.

- 1.10 **Lessons learned.** The main lessons learned from Bank activities concern: (i) the importance of digitalization as a catalyst for fostering economic development. This lesson has been incorporated into Component 1 (supporting the transition to digital television), Component 2 (expanding digital infrastructure), and Component 3 (building digital skills); (ii) the need for digital infrastructure and skills to reach a level of development that makes it possible to step up access to digital services and the adoption and continuity of those services. This lesson has been captured in Component 2 (expanding digital infrastructure), and Component 3 (building digital skills); and (iii) the need to tap the support of the private sector to ensure the sustainability of the operation and maintenance efforts. This lesson is taken into account in Component 2 (executed in collaboration with the private sector).
- 1.11 **Complementarity with other IDB Group operations in the country.** Technical cooperation operation [ATN/KK-17297-DR](#) (US\$600,000), currently in implementation, will support the program by conducting feasibility studies for the development of the national broadband plan and policies and regulations for the implementation of the roadmap for the transition from analog to digital television. It will also support the preparation of bidding documents with technical and service quality specifications for the main bidding processes under the program. This technical cooperation initiative is therefore supporting the comprehensive digitalization of the Dominican Republic through the development of a strategy for implementing rural broadband infrastructure and introducing a nationwide digital transmission system to improve connectivity. The program will also benefit from studies and publications produced by the [digiLAC](#) platform and the dialogue network being organized as part of the Regional Public Goods Initiative (operation [ATN/OC-17689-RG](#)).
- 1.12 **Strategic alignment.** The program is consistent with the second Update to the Institutional Strategy (document AB-3190-2) and is strategically aligned with the following development challenges: (i) social inclusion and equality, by increasing broadband access and improving service quality;<sup>47</sup> and (ii) productivity and innovation, by supporting the use of digital technologies that will help to step up access to digital services and the adoption and continuity of those services. The program is also aligned with the crosscutting themes of: (i) institutional capacity and rule of law, by developing the public policy framework and strengthening digital capacity; (ii) gender equity, by encouraging women to participate in digital skills training courses (paragraph 1.191.19), with their participation being measured

---

<sup>47</sup> Especially when considering that access to digital infrastructure will ensure that people who live in areas far from large urban centers can benefit from comparable prices and service quality.

using the indicators set out in the results matrix (Annex II); and (iii) climate change, through sustainable digital infrastructure that will help to reduce the country's carbon footprint through trips saved (which is typical for investments in the sector), efficiency gains in processes that use digital infrastructure solutions, and measures for adapting to climate-related hazards. The activities to be carried out under Component 2 will place priority on the installation of equipment that is highly energy-efficient and resilient to climate change and geophysical hazards. In line with the [joint methodology of the multilateral development banks](#), 70.18% of the operation's resources will be invested in climate change mitigation and adaptation activities.<sup>48</sup> These resources will contribute to the achievement of the IDB Group target of increasing financing for climate-related projects to 30% of all approvals in 2021.

- 1.13 In addition, the program will contribute to the Corporate Results Framework 2020-2023 (document GN-2727-12) through the “beneficiaries with new access to at least a 4G mobile network” indicator. The operation also aligns with the Sector Strategy on Institutions for Growth and Social Welfare (document GN-2587-2) through the action area of “improving innovation and productivity for growth and social welfare.” It is also consistent with the Innovation, Science, and Technology Sector Framework Document (document GN-2791-8), through the dimension of promoting the ability of Latin American and Caribbean economies to take full advantage of the potential of the digital economy, and is consistent with the Gender and Diversity Sector Framework Document (document GN-2735-7) and the Climate Change Sector Framework Document (document GN-2835-5), as it will promote high-quality, relevant digital skills training as a way of narrowing the gender divide and support the deployment and use of energy-efficient infrastructure and equipment. The operation is also aligned with the IDB Group Country Strategy with the Dominican Republic 2017-2020 (document GN-2908),<sup>49</sup> through the strategic objective of improving productive infrastructure by developing and expanding telecommunications infrastructure. This, in turn, will contribute to progress in the priority area of reducing poverty and inequality, as improved connectivity in remote areas will pave the way for the expansion of productive infrastructure.
- 1.14 **Compliance with the Public Utilities Policy.** This program complies with the objectives, principles, and financial sustainability and economic viability conditions set out in the Public Utilities Policy (document GN-2716-6) by ensuring that the method of service delivery will cover operating and maintenance costs through a minimum subsidy mechanism (paragraph 1.18). It will also ensure coordination between INDOTEL, OPTIC, ETED, and UNTFO to design and implement the national broadband plan (paragraph 3.3). In addition, the design of public policies and regulations will contribute to the supply of telecommunications services and universal access to those services. More specifically, the program: (i) has a feasibility analysis that has helped identify least-cost technological

---

<sup>48</sup> In coordination with specialists from the Climate Change and Sustainable Development Sector, guidelines and a checklist will be prepared for bidders to complete when submitting proposals (optional link 4, [climate change strategy](#)).

<sup>49</sup> The Country Strategy is in transition but is still current.



solutions, ensuring an appropriate balance of cost/efficiency for the public; (ii) is based on a comprehensive approach, deploying infrastructure based on needs identified by the government; and (iii) supports the development of broadband technology that provides access to cost-effective solutions (see optional link 7, [analysis of compliance with the Public Utilities Policy](#) (document GN-2716-6)).

- 1.15 **Innovative features of the program.** The program's main innovations are: (i) the design and implementation of a roadmap for freeing up portions of the spectrum by transitioning to digital television (paragraph 1.17); (ii) the deployment of digital infrastructure to improve connectivity in remote areas (see optional link 6, [technical considerations and definition of target area](#)); (iii) the use of energy-efficient and climate-resilient digital infrastructure; and (iv) the narrowing of the gender divide in digital skills (paragraph 1.19).

## **B. Objectives, components, and cost**

- 1.16 **Program objective.** The general objective is to increase the level of digitalization for the people of the Dominican Republic in order to step up access to digital services and the adoption and continuity of those services. To that end, the project's specific objectives are: (i) to improve national connectivity by investing in digital infrastructure and improving broadcasting service; and (ii) to build digital skills and competencies while incorporating a gender perspective. On the basis of these objectives, the program has been designed around the following three components:
- 1.17 **Component 1. Transition from analog to digital television (US\$30 million).** Financing will be provided for the following activities: (i) policies to support digital dividend spectrum auctions; (ii) design and implementation by INDOTEL of a plan for transitioning from analog to digital television; (iii) equipment and infrastructure to modernize broadcasting services, including the acquisition of digital signal receivers and decoders, their distribution to beneficiaries, and the associated logistics costs; and (iv) design and implementation of a communication strategy.
- 1.18 **Component 2. Broadband connectivity and infrastructure (US\$80 million).** Under this component, financing will be provided for the following activities: in municipal district capitals that have weak backbone, aggregation, or access network coverage or no coverage at all, the necessary infrastructure will be installed to enable local broadband connectivity and internet providers to make use of these resources. More specifically, financing will be provided for the following sub-outputs, which will be energy-efficient and climate-resilient: (i) expansion and provision of additional equipment for the backbone network; (ii) expansion and provision of additional equipment for aggregation networks; and (iii) expansion and provision of additional equipment for access networks. In the case of backbone networks, the program provides for the lease or purchase of use agreements in the form of indefeasible rights of use<sup>50</sup> or similar arrangements for submarine fiber

---

<sup>50</sup> The acquisition of indefeasible rights of use allows the rights holder to use a specified amount of the capacity of a fiber optic cable for a set amount of time. Typically, this involves dark fiber optic cable (not activated or not connected to any equipment) which is then "lit" (activated) by connecting it up to optical hardware.

optic cables with landing points in the country. In some cases, financing will also be provided for the network's administrative, operating, and maintenance costs for the duration of program execution. Additionally, this component will finance the expansion of international connectivity<sup>51</sup> through the acquisition of redundant and/or additional capacity. The criteria to be used for prioritizing the expansion of connectivity will be as follows: (i) the social impact on beneficiaries; (ii) increased cost-efficiency and energy savings; and (iii) agreement by the municipio to be connected up to the network. The private sector will participate via bidding processes, including a minimum subsidy system (see optional link 5, [minimum subsidy bidding system](#)),<sup>52</sup> which will foster sustainability. The equipment procurement procedures will incorporate considerations of energy efficiency and potential climate-related risk management. In the beneficiary municipios, which have already been identified based on the prioritization criteria, the program will not carry out civil works projects but rather will leverage existing infrastructure using telecommunications equipment and networks that maximize available broadband capacity.

- 1.19 **Component 3. Digital skills and competencies (US\$4 million).** This component will provide financing for virtual and in-person digital skills trainings on the use of digital equipment and technology, with a gender lens, to help people in the target area (see optional link 6, [technical considerations and definition of target area](#))<sup>53</sup> develop digital skills (at both the basic user and advanced user levels) in order to step up access to digital services and the adoption and continuity of those services. This activity aims to help close the digital divide, and especially the gender divide, by encouraging people to take advantage of the opportunities offered by ICTs. Trainee selection criteria will mainly include whether the persons in question come from poor households, their initial digital skills level, and whether they reside in municipios where there is a single broadband service provider or no such provider at all.
- 1.20 **Program administration (US\$1 million).** These funds will be used to support the program management unit with the procurement of goods and services needed to execute program planning, administration, monitoring, audit, and evaluation activities.
- 1.21 **Beneficiaries.** The program will directly benefit 24 municipios (with a combined population of 195,761) that lack wired Internet service networks, 78 municipios (with a combined population of 1,894,643) that have a single wired Internet service

---

<sup>51</sup> Defined as physical connection to the high-capacity networks of Tier 1 operators.

<sup>52</sup> The minimum subsidy bidding system is an auction-based system for providing connections to locations that meet certain minimum qualitative requirements while taking their existing infrastructure into account. The government offers an indirect subsidy for this purpose. Once the bids that do not at least meet the minimum requirements have been screened out, the contract is then awarded to the bidder who requests the smallest subsidy.

<sup>53</sup> The project will be carried out in the country's 158 municipios: (i) Component 1 will be conducted at the national level; (ii) Component 2 will be implemented in 24 municipios that lack wired Internet service networks, 78 municipios that have a single wired Internet service network, and 56 municipios that have two or more wired Internet service networks; and (iii) Component 3 will be carried out at the national level.

network, and 56 municipios (with a combined population of 8,148,959) that have two or more wired Internet service networks. It will directly benefit the persons who use digital services in the target area, the members of the population who will receive digital skills training, and the entire country as the transition is made from analog to digital television. It will also indirectly benefit the private sector and mobile broadband users by freeing up portions of the spectrum.<sup>54</sup>

## **C. Key results indicators**

- 1.22 **Expected development impacts and outcomes.** The outcomes associated with the general development objective of this specific investment loan will be as follows: (i) the improved penetration of fixed broadband Internet service (measured by the number of fixed broadband accounts per 100 inhabitants); (ii) an improvement in digital skills among the active population as measured by the WEF indicator; and (iii) an increased differential between the percentages of women living in poverty and active in the labor force in the treatment and nontreatment groups. The outcomes associated with the program's specific objectives will be: (i) an improvement in national connectivity attributable to the actions taken to free up the spectrum and invest in digital infrastructure (measured by the number of operators who use the newly available parts of the spectrum to offer services, the average mobile broadband speed in the country, the number of municipios in the country in which broadband is not available, the number of municipal district capitals impacted by the project that are interconnected with the backbone network, and the number of fixed broadband accounts per 100 inhabitants in municipios that have only a single operator or no operator at all; and (ii) an increase in digital skills, with a gender lens (measured by the number of persons who complete digital skills training and obtain the corresponding certification, the percentage of persons living in poverty who are not computer literate in the 24 municipios that currently do not have an operator, and the percentage difference between women and men living in poverty who are not computer literate in the 24 municipios that currently have no operator).
- 1.23 **Economic analysis.** The project will have two main types of benefits. The first will be the increased availability of broadband service and the lower price of fixed Internet service in municipios where there are no operators. This will help develop the market and therefore support the generation of surpluses for consumers and producers. The second has to do with the provision of digital skills training and Internet access, which will increase the likelihood that beneficiaries can successfully enter the labor market and consequently boost their incomes. Based on a social discount rate of 12% and a 15-year evaluation horizon, the project is estimated to have a net present value of US\$53.7 million, an internal rate of return of 36%, and a benefit-cost ratio of US\$1.53 per US\$1 invested. A sensitivity analysis of the expected economic result was conducted using three variables considered key due to their potential impact on the project's economic results:

---

<sup>54</sup> The analog switch-off involved in transitioning from analog to digital television will free up portions of the radioelectric spectrum. At a later stage, those frequencies can be allocated to high-quality (e.g. 4G or 5G) mobile broadband service. This will benefit both private sector providers and the customers of these services.



(i) the expected reduction in the price of fixed broadband service; (ii) the effect of training and broadband penetration on the employment rate (based on the literature); and (iii) the percentage of the population that successfully completes the training courses. The sensitivity analysis with more conservative assumptions yielded an internal rate of return of between 36% and 12% and a benefit-cost ratio of between US\$1.53 and US\$1.00. These ranges exceed the thresholds for each of these indicators (optional link 1, [project economic analysis](#)).

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing instruments

- 2.1 This operation is a specific investment loan consisting of US\$115 million from the Bank's Ordinary Capital with a disbursement period of five years. The loan will fund the procurement of network components and equipment and digital skills training to improve access to digital services. This will be accomplished in cooperation with the private sector, which will be involved in executing the activities made possible by the program-funded procurement of those materials.

Table 1. Estimated program costs (US\$)<sup>55</sup>

Component	IDB	%
<b>Component 1. Transition from analog to digital television</b>	<b>30,000,000</b>	<b>26.09</b>
Policies to support digital dividend spectrum auctions	500,000	0.44
Design and implementation by INDOTEL of a plan for transitioning from analog to digital television	750,000	0.65
Equipment and infrastructure	28,000,000	24.35
Design and implementation of a communication strategy	750,000	0.65
<b>Component 2. Broadband connectivity and infrastructure</b>	<b>80,000,000</b>	<b>69.56</b>
Expansion, provision of equipment, and wiring of backbone, aggregation, and access networks	70,000,000	60.87
Expansion of international connectivity	10,000,000	8.69
<b>Component 3. Digital skills and competencies</b>	<b>4,000,000</b>	<b>3.48</b>
Digital skills training program on the use of equipment and technology with a gender lens	4,000,000	3.48
<b>Program administration</b>	<b>1,000,000</b>	<b>0.87</b>
Planning and administration	600,000	0.52
Monitoring	75,000	0.07
Audits	75,000	0.07
Evaluation	25,000	0.21
<b>Total</b>	<b>115,000,000</b>	<b>100</b>

<sup>55</sup> The amount per component can be changed through a written agreement between the parties provided that it does not entail any change to the program objectives and the financial plan and other management instruments are used. The estimated amounts are indicative.

**Table 2. Projected disbursements (US\$ millions)**

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
<b>Amount</b>	4.000	27.875	27.875	27.875	27.375	<b>115</b>
<b>%</b>	3.48	24.24	24.24	24.24	23.80	<b>100</b>

## **B. Environmental and social risks**

- 2.2 In accordance with the Bank's Environment and Safeguards Compliance Policy (Operational Policy OP-703), this program has been classified as a Category "C" operation because the associated environmental and social risks are expected to be minimal. Funding will not be provided for the deployment of underground fiber optic cable because the program calls for the use of existing infrastructure and because services will only be contracted from providers and companies that are already present in the market. Compliance with applicable local regulations, restricting the scope to the use of existing infrastructure, and effective procedures and flows for determining the actions, responsible parties, and time frames for the socio-environmental management of program works will be included in the [program Operating Regulations](#), which must be approved by the Bank as a condition precedent to the first disbursement. The potential risks to project activities and outcomes stemming from the ongoing COVID-19 situation are also considered to be minimal because herd immunity should be reached by the time that project execution begins given the pace at which the population is being vaccinated.

## **C. Fiduciary risks**

- 2.3 An assessment of INDOTEL's institutional capacity was performed in February 2021. That assessment indicated that its fiduciary capacity for program execution is medium-high. However, the assessment also found that the executing agency does not currently have the procurement and financial management staff needed to take on the fiduciary tasks and that it does not have experience in the execution of projects financed by the Bank or other multilateral agencies. A medium-high level of risk was identified in connection with internal processes, since any shortcomings that were to affect the management of bidding processes, the application of the Bank's procurement policies, and/or the program's financial management could delay the preparation of financial reports, which, in turn, could jeopardize the achievement of program objectives within the established time frame. The measures for mitigating this risk are: (i) recruitment/assignment of a procurement specialist and an administrative/financial specialist; and (ii) targeted trainings on IDB policies and fiduciary guidelines for key staff members.

## **D. Key issues**

- 2.4 **Program sustainability.** As part of the mandate entrusted to it under Executive Order 593-20, INDOTEL will be in charge of coordinating the long-term technical and financial sustainability of this initiative thanks to the transfer of know-how by telecommunications systems providers during project execution (paragraphs 1.17 and 1.18). In addition, the obligation to ensure the maintenance of the assets acquired by the program will be included in the contracts signed with the

companies that submit the winning bids. This will contribute to the effort to increase the penetration of fixed broadband Internet services by helping to ensure the adoption and continuity of those services. Following the execution of the proposed program, the Dominican Republic should be better prepared to oversee the adoption and continued delivery of digital services in the event of a future health crisis like the present one, because the program calls for such initiatives as connectivity infrastructure projects that will promote the use of government-financed networks by third parties and the formulation of policies for furthering the adoption of ICTs as tools for economic and human development.<sup>56</sup>

### III. IMPLEMENTATION AND MANAGEMENT PLAN

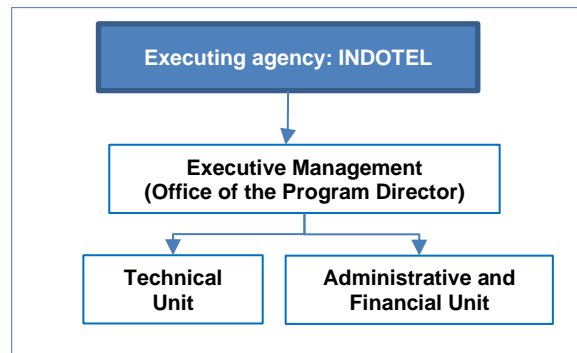
#### A. Summary of implementation arrangements

- 3.1 **Execution mechanism.** The borrower will be the Dominican Republic. INDOTEL will be the executing agency and has been authorized by Executive Order 539-20 to undertake the design, coordination, and implementation of the digitalization process in the Dominican Republic. In the last three years, INDOTEL has executed locally funded projects such as the Wi-Fi Access in Public Areas Project and the PuntoGOB Santiago Project (technology component), thereby demonstrating that it has the necessary program implementation capacity. INDOTEL will be responsible to the Bank for program execution, and its primary duties will be as follows: (i) conduct the procurement processes envisaged under the program and supervise their implementation; and (ii) prepare: (a) the procurement plan and the multiyear execution plan along with any modifications thereto; (b) semiannual progress reports; (c) audited financial statements; (d) the midterm evaluation report; and (e) the final evaluation report. In order for it to carry out these functions, INDOTEL will be in charge of planning and monitoring, project management, administration, procurement management, financial management, environmental and social management, and communications. During program execution, INDOTEL's executive director will act as the program director, tapping one official from INDOTEL's Finance Department to serve as the financial management specialist and one official from its Administrative Department to serve as the program procurement specialist. The program execution team will therefore include, at a minimum: (i) the program director; (ii) a procurement specialist; and (iii) a financial specialist. In addition, financing will be provided for the following consultants to support program execution: a consultant to support the procurement specialist, a consultant with experience with Bank policies to support the financial specialist, and, as needed, a consultant specializing in planning and monitoring, one specializing in communications, one specializing in legal matters, and technical specialists for each component in accordance with the profiles established in the [program Operating Regulations](#). The executing agency's organizational structure for program execution will include the Office of the Program Director, which will report directly to the Office of the Executive Director of INDOTEL, a technical unit, and an administrative/financial unit.

---

<sup>56</sup> [Digitalización: Herramienta de Defensa ante la Crisis del COVID-19 y para el Desarrollo Sostenible](#). IDB.

**Figure 3. Organizational structure of the executing agency for program execution**



Source: Prepared by the authors.

- 3.2 Program management will have the following duties: (i) liaising with the Bank; (ii) planning and monitoring; (iii) managing procurements; (iv) administering program resources, which includes processing disbursement requests and preparing reports on the use of funds; (v) preparing and submitting to the Bank the multiyear execution plan, the procurement plan and any modifications thereto, semiannual progress reports, audited financial statements, the midterm evaluation report, the final evaluation report, and any other documentation specified in the [program Operating Regulations](#); and (vi) supervising management of the program's environmental and social considerations, as necessary. The Technical Unit will have the following duties: (i) preparing technical specifications (throughout the duration of the contract); (ii) preparing technical and fiduciary inputs for bidding specifications; and (iii) preparing inputs for monitoring, evaluation, and supervision reports. The Administrative and Financial Unit will have the following duties: (i) preparing the bidding specifications; (ii) monitoring procurement processes; (iii) preparing monitoring, evaluation, and supervision reports; and (iv) administering funds and accountability reporting to the Bank.
- 3.3 **Strategic/operational coordination mechanisms for program implementation.** To ensure the successful implementation of program activities and their sustainability and in accordance with Executive Order 539-20, INDOTEL will coordinate with the telecommunications system providers responsible for carrying out project activities (paragraphs 1.17 and 1.18) during program execution with a view to ensuring that they transfer know-how and thus demonstrate their commitment to the initiative's long-term technical and financial sustainability. More detailed provisions regarding the coordination mechanisms will be set out in the [program Operating Regulations](#). Under Executive Order 539-20, INDOTEL will also coordinate with the Digital Transformation Cabinet<sup>57</sup> in the design and implementation of the national broadband plan and the design of public policies and regulations to promote the availability of telecommunications services and

---

<sup>57</sup> Pursuant to Decree 539-20, the Digital Transformation Cabinet consists of OPTIC, ETED, and UNTFO, as well as any other institution added in the future.

universal access to them. Efforts are currently underway to draw up an agreement between INDOTEL, the Dominican Federation of Municipios, and the Dominican Municipal League that will define the mechanism to facilitate working with local governments to secure permits for infrastructure deployment.

- 3.4 **Program Operating Regulations.** The [program Operating Regulations](#) establish the main regulatory provisions concerning the operational practices, organizational structure, and work procedures to be used by the institutions and agencies taking part in program execution. These regulations specify the technical, administrative, and financial safeguards required to achieve the expected outcomes and targets while meeting established quality standards within the execution period provided for in the loan contract.
- 3.5 **Special operational contractual conditions precedent to the first disbursement of the loan proceeds.** Before the first disbursement, the executing agency will submit evidence to the Bank that: (i) a subsidiary agreement has been signed with the Ministry of Finance for the transfer of resources and program execution in accordance with the terms and conditions previously agreed upon with the Bank; (ii) it has established a program management unit and recruited or designated, as the case may be, key personnel for that unit (a program director, a procurement specialist, and a financial specialist); and (iii) the [program Operating Regulations](#) have been approved in accordance with the terms and conditions previously agreed upon with the Bank. These conditions are vital to ensuring the successful execution of the program, as they will set forth in detail the guidelines and procedures to be followed by the executing agency.
- 3.6 **Procurement of works, goods, and consulting and nonconsulting services.** Procurements financed with loan proceeds will be carried out in accordance with the Policies for the Procurement of Goods and Works financed by the Inter-American Development Bank (document GN-2349-15) and the Policies for the Selection and Contracting of Consultants financed by the Inter-American Development Bank (document GN-2350-15).
- 3.7 **Retroactive financing.** The Bank may retroactively finance, as a charge against the loan proceeds, up to US\$23 million (20% of the proposed loan amount) in eligible expenditures related to the procurement of decoders and receivers in connection with the analog switch-off, their distribution to beneficiaries, and associated logistics costs in support of the third activity to be carried out under Component 1, provided that requirements substantially similar to those established in the loan contract, including the IDB's policies on safeguards, procurement, and the processing of sovereign-guaranteed operations, have been met. Such expenditures will have been incurred on or after the project profile approval date (5 March 2021) but under no circumstances may include expenditures incurred more than 18 months prior to the loan operation approval date.
- 3.8 **Disbursements and justification of advances.** The primary disbursement modality used for the program will be advances of funds based on a financial planning horizon of up to six months. For this operation, supporting documentation will be provided for 80% of the total cumulative balances pending justification.

- 3.9 **Audits.** During program execution, INDOTEL will submit the program's audited financial statements on an annual basis in accordance with the terms of reference previously agreed upon by the executing agency and the Bank. The program will require the selection of a Bank-eligible independent audit firm in the Dominican Republic. The annual audited financial statements are to be submitted within 120 days after the closing date of each fiscal year. The final financial audit report is to be submitted within 120 days after the date of the last disbursement.

**B. Summary of arrangements for monitoring results**

- 3.10 **Monitoring and supervision system.** The outcome and output indicators for each component set out in the results matrix (Annex II) and reflected in the progress monitoring report will be used to measure the program's progress and evaluate fulfillment of its objectives. The executing agency will be responsible for maintaining data collection and monitoring systems. The multiyear execution plan will include: (i) an estimated budget; (ii) an updated procurement plan; (iii) results matrix indicators (Annex II); (iv) planned activities; and (v) an execution timeline. INDOTEL will also submit semiannual progress reports within 60 days after the end of each six-month period. The tools to be used for program monitoring are discussed in greater detail in the [monitoring and evaluation plan](#).
- 3.11 **Monitoring by the Bank.** The Bank will conduct administrative missions and inspection visits. The Bank agrees that INDOTEL will prepare the progress monitoring report, which will project program disbursements and the attainment of physical targets and results. Yearly meetings will be held with the Bank to discuss: (i) the progress of the activities; (ii) the extent of fulfillment of the results matrix indicators (Annex II); (iii) the disbursement plan for the coming year; and (iv) the procurement plan for the next 12 months along with any potential modifications of the per component budget allocations. The executing agency commits to maintaining a system for monitoring and evaluating all program components and will use this system as a basis for preparing reports and information for submission to the Bank. The executing agency will have a specialist who is responsible for monitoring program activities (see the [monitoring and evaluation plan](#)).
- 3.12 **Midterm and final evaluations.** The results matrix (Annex II) and the [monitoring and evaluation plan](#) will be used to evaluate the program, and the cost of the evaluations is included in the loan budget. The program calls for the preparation of a midterm and a final evaluation, which will cover the technical, administrative, and financial aspects of the program and will include an ex post cost-benefit analysis. The midterm evaluation will be prepared once at least 50% of the loan proceeds have been disbursed or once three years have passed since the loan contract entered into effect (whichever comes first). The main objectives of this evaluation will be to review the progress made in all the activities programmed up to that time, along with any deviations that may have occurred and the reasons for them, and to propose remedial measures, as well as to check whether the intermediate outputs have been produced and whether any of the risks identified in the matrix have materialized (and, if so, to implement measures to mitigate them). The final evaluation will be prepared when at least 90% of the loan proceeds have been disbursed. Its purpose will be to verify the progress made toward the achievement of the targets set for each of the expected outcomes and the generation of outputs by component. The Bank will prepare a project completion report for submission

within 180 days of the last disbursement. This report will be based on the executing agency's semiannual progress reports, the progress monitoring reports, the results matrix (Annex II), the audited financial statements, the midterm and final evaluation reports, the outcomes of the evaluation workshops, and the findings of any other studies, research, or activities deemed relevant.

- 3.13 **Impact evaluation.** An impact evaluation will be prepared using a quasi-experimental methodology that will make it possible to establish the causal effects of the intervention. To this end, the program plans to evaluate the impact of the use of Internet-of-Things technologies on the entry into the labor market of women living in poverty who have received digital skills training. Key variables in the adoption of digital technologies in areas where digitalization may have the greatest impact will be defined and monitored. This approach should generate evidence that can serve as a basis for public policy recommendations (see the [monitoring and evaluation plan](#)).



Development Effectiveness Matrix		
Summary		DR-L1147
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Social Inclusion and Equality -Productivity and Innovation -Gender Equality and Diversity -Climate Change -Institutional Capacity and the Rule of Law	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Beneficiaries with new access to at least a 4G mobile network (#)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-2908	Improve productive infrastructure
Country Program Results Matrix		The intervention is not included in the 2021 Operations Program
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution	10.0	
3.1 Program Diagnosis	2.5	
3.2 Proposed Interventions or Solutions	3.5	
3.3 Results Matrix Quality	4.0	
4. Ex ante Economic Analysis	10.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	1.5	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	2.5	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	1.0	
5. Monitoring and Evaluation	8.6	
5.1 Monitoring Mechanisms	4.0	
5.2 Evaluation Plan	4.6	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Low	
Environmental & social risk classification	C	
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting.  Procurement: Information System, Price Comparison.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	A Technical Cooperation (ATN / KK-17297-DR) is available to support Digital Transformation in the Dominican Republic. The objective is the identification of the infrastructure gap and the institutional model to support the digital transformation

After a period of healthy economic growth, the Dominican Republic underwent a GDP contraction of 6.7% in 2020. Unemployment increased from 10.8% to 14.9%. The pandemic caused by COVID-19 has evidenced the importance of affordable access to telecommunications with estimates that indicate that these technologies can salvage up to 25% of production under the sanitary policies that mandate social distancing. The Dominican Republic's government has expressed interest in universalizing access to internet and broad band. Currently, less than 10% of rural homes have access to fixed internet, in part because of the high dispersion of a quarter of the total population across more than 120 municipalities. The cost for internet and telephone services is high in remote locations representing 10% of the monthly income for the 40% of the population with the lowest income. Moreover, the World Economic Forum gives the country a score of 3.6 over 7 in digital abilities. In the country, fixed and mobile broad band penetration should be increased given that 95% of the territory has no coverage to fixed broad band or it is of low capacity. Private operators seek to bring services to the more densely populated areas with higher profitability, which is why there is a need for a public-private intervention. To overcome the low access a key element will be the transition from analogical to digital broadcasting given that this transition will open spectrum for a higher capacity, efficiency, and quality of service. In this context, the general objective of the program is to increase digitalization for the citizens of the Dominican Republic to accelerate access, adoption, and continuity of digital services. To achieve this the following specific objectives were defined: (i) improve national connectivity through an investment in digital infrastructure and the betterment of broadcasting service; and (ii) increase digital abilities and competencies, including with a gender focus. The program will support the transition from analogical to digital by supporting policies for the tenders for spectrum rights and by providing equipment. Moreover, the program will invest in infrastructure with energy efficient characteristics for the provision of aggregation or new access networks for the municipalities that do not have coverage. Furthermore, capacity building in digital abilities with a gender focus will be provided at both a basic and advanced level in municipalities with none or only one operator. The Results Matrix is coherent with the program's vertical logic. The results indicators are appropriately defined to measure the achievement of each specific objective. Amongst others, some of the main results include the number of municipalities in the country without a broad band offering, the national average of mobile broad band speed, the number of subscriptions to fixed broad band in municipalities that today have none or only one operator, and the percentage of people in poverty without knowledge of informatics in the municipalities that currently have no operators. The economic analysis shows the intervention is of net benefit with an IRR of 36%. The Monitoring and Evaluation Plan proposes a before-and-after reflexive methodology for the majority of the Results Matrix indicators that will be complemented by a quasi-experimental evaluation focused on estimating the effect of internet use on women's entry to the labor market.



## RESULTS MATRIX

<b>Project objective:</b>	The general objective is to increase the level of digitalization for the people of the Dominican Republic in order to step up access to digital services and the adoption and continuity of those services. To that end, the project's specific objectives are: (i) to improve national connectivity by investing in digital infrastructure and improving broadcasting service; and (ii) to build digital skills and competencies while incorporating a gender perspective.
---------------------------	---

### General development objective

Indicator	Unit of measurement	Baseline	Baseline year	Expected year achieved	Target	Means of verification	Comments
<b>General development objective: to increase the level of digitalization for the people of the Dominican Republic in order to step up access to digital services and the adoption and continuity of those services</b>							
Number of fixed broadband accounts per 100 inhabitants	%	9.1	2020	2026	21	INDOTEL	This indicator is calculated as follows: (Number of fixed broadband accounts / Number of inhabitants)*100. It is computed by INDOTEL based on its administrative data. A target of 21 accounts per 100 inhabitants has been established by extrapolating the value of this indicator in areas with an ample supply of fixed broadband services in line with the upward trend in the number of accounts.
Digital skills among the active population as measured by the World Economic Forum (WEF) indicator	Index	4.51	2019	2026	4.7	<a href="#">digiLAC</a> , Broadband Development Index, applications and training pillar; WEF, Global Competitiveness Report, skills pillar	The aim is to attain the average rate for IDB countries.
Differential between the percentages of women living in poverty and active in the labor force in the treatment and nontreatment groups	Percentage points	0	2020	2026	4	Calculated using data from the Consolidated Beneficiary System (SIUBEN)	Pro-gender indicator. The literature finds impacts ranging from 0.056 percentage points for the employment rate (Katz et al., 2013) and 0.028% for job growth (García et al., 2012) for each 1% of increase in broadband penetration. Given that penetration is expected to increase by about 100% (from 9.1 to 21), a conservative target of four percentage points has been set.

### Specific development objectives

Indicator	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of verification	Comments
<b>Specific development objective: (i) to improve national connectivity by investing in digital infrastructure and improving broadcasting service</b>											
Number of operators using the newly available parts of the spectrum to offer services	Number	0	2020	0	1	1	2	2	2	INDOTEL	Freeing up the spectrum will result in greater capacity and improved broadcasting service. This indicator focuses on operators as intermediate beneficiaries, since this measure will allow them to offer more and better services to the population of the Dominican Republic. A conservative target of two has been set, as the expectation is that at least two of the operators active in the country will make use of the newly available frequencies.
Average mobile broadband speed in the country	Megabits per second (Mbps)	28.5	2020	32.8	37.3	42.4	48.1	54.7	54.7	Speedtest.net Global Index	This indicator takes into account the fact that, once there is more free space in the spectrum, mobile broadband speeds will be greater, since the extra space facilitates transmission.
Number of municipios in the country in which broadband service is not available	Number	24	2020	24	18	12	6	0	0	INDOTEL	The program intends to generate and improve the supply of Internet service in the country's 158 municipios, but this indicator focuses on those municipios where no such service is available. The target is for service to be available in all municipios by program end.

Indicator	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of verification	Comments
Number of municipal district capitals impacted by the project that are interconnected with the backbone network	Number	0	2020	0	2	4	6	8	8	INDOTEL	The program should not only set up interconnections with the backbone network and put the related infrastructure (outputs) in place in eight municipal district capitals, but also get this infrastructure up and running so that the residents of these municipios can enjoy better service.
Number of fixed broadband accounts per 100 inhabitants in municipios that have only a single operator or no operator at all	Number	3.5	2020	3.5	4.37	5.24	6.11	6.99	6.99	INDOTEL	The increase is estimated using the value for this indicator in municipios where two or more operators provide this service. The expectation is that the level of penetration in the municipios where access is currently the most limited <sup>1</sup> will be on par with the more advanced municipios.

<sup>1</sup> The municipios where there is only one operator or no operator at all are: Estebanía, Guayabal, Galván, Los Ríos, Jaquimeyes, La Ciénaga, Las Salinas, Polo, Restauración, Bánica, El Llano, Hondo Valle, Juan Santiago, Pedro Santana, Cristóbal, La Descubierta, Postrer Río, Pepillo Salcedo, Oviedo, Los Cacaos, Rancho Arriba, Bohechío, Vallejuelo, Baitoa, Las Charcas, Padre Las Casas, Peralta, Pueblo Viejo, Sabana Yegua, Tábara Arriba, Tamayo, Villa Jaragua, Cabral, El Peñón, Enriquillo, Fundación, Paraíso, Vicente Noble, Dajabón, El Pino, Loma De Cabrera, Partido, Arenoso, Eugenio María De Hostos, Pimentel, Villa Riva, Miches, Comendador, San Víctor, El Valle, Sabana De La Mar, Villa Tapia, Duvergé, Jimaní, Mella, San Rafael Del Yuma, Constanza, Jarabacoa, Jima Abajo, Cabrera, El Factor, Río San Juan, Castañuelas, Guayubín, Las Matas De Santa Cruz, Monte Cristi, Villa Vásquez, Bayaguana, Peralvillo, Sabana Grande De Boyá, Yamasá, Pedernales, Matanzas, Nizao, Altamira, Guanico, Los Hidalgos, Luperón, Villa Isabela, Villa Montellano, Samaná, Sánchez, Sabana Grande De Palenque, Villa Altagracia, Yaguata, Sabana Larga, San José De Ocoa, El Cercado, Juan De Herrera, Las Matas De Farfán, San Juan, Consuelo, Guayacanes, Cevicos, La Mata, Jánico, Sabana Iglesia, San José De Las Matas, Monción, San Ignacio De Sabaneta, Villa Los Almácigos, and Laguna Salada.

Indicator	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of verification	Comments
<b>Specific development objective: (ii) to build digital skills and competencies while incorporating a gender perspective</b>											
Number of persons who complete digital skills training and obtain the corresponding certification	Number	0	2020	0	25,000	75,000	100,000	140,000	140,000	INDOTEL	This target has been set based on the following factors: training costs, funding, and the fact that the municipios that have only one operator or no operator at all are home to 1,147,025 people living in poverty who are not computer literate. An average cost of US\$20 per person has been estimated. While the program plans to provide training to nearly 200,000 people, the measurement is based on the number of people who receive and successfully complete that training.
Percentage of persons who are not computer literate living in poverty in the 24 municipios that currently do not have an operator <sup>2</sup>	%	76.69	2020	71.0	69.75	68.5	67.25	66	66	Calculated using data from SIUBEN or special-purpose surveys	This target has been calculated based on the number of training courses and the positive effects of the increase in coverage. It is estimated that the population of the 24 municipios that do not have an operator includes 108,517 people who are not computer literate and who are living in poverty. Given the number of training programs allocated for those municipios, the reduction is conservatively estimated at 15%.  If up-to-date information from

<sup>2</sup> A person is classified as not being computer literate based on information collected by SIUBEN using the questionnaire found at <https://siuben.gob.do/publicaciones/cuestionario-esh-2018-2/>. SIUBEN compiles data on all poor households in the country and is the main tool used for targeting social policies. It compiles information on approximately 7 million people once every four years and updates that information on an ongoing basis.

Indicator	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of verification	Comments
											SIUBEN is not available upon the conclusion of the operation, the program will provide funding for a survey of a representative sample of this population.
Percentage difference between women and men who are not computer literate and who are living in poverty in the 24 municipios that currently have no operator	Percentage points	2.82	2020	2.72	2.52	2.52	2.42	2.32	2.32	Calculations based on data from SIUBEN or from a special-purpose survey	Pro-gender indicator. The target has been estimated based on the number of training courses to be provided relative to the size of the target population. This indicator has been developed using the following formula: (Total number of men who are not computer literate living in poverty in municipios without an operator / Total number of men living in poverty in municipios without an operator) - (Total number of women who are not computer literate living in poverty in municipios without an operator / Total number of women living in poverty in municipios without an operator).  If up-to-date information from SIUBEN is not available upon the conclusion of the operation, the program will provide funding for a survey of a representative sample of this population.

### Outputs

Indicator	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of verification	Comments
<b>Component 1: Transition from analog to digital television (US\$30 million)</b>											
<b>Output 1:</b> Policies to support digital dividend spectrum auctions	Policy on the spectrum	0	2020	1	1	1	1	1	1	Audited semiannual INDOTEL report	The policy on the spectrum should be completed by the end of year 1 at the latest and concurrently with output 4.
<b>Output 2:</b> Design and implementation by INDOTEL of the plan for transitioning from analog to digital television	Transition plan	0	2020	1	1	1	1	1	1	Audited semiannual INDOTEL report	The transition plan should be completed by the end of year 1 at the latest and concurrently with output 3 so that its implementation can begin in year 2.
<b>Output 3:</b> Equipment and infrastructure	Number of devices installed	0	2020	0	250,000	500,000	750,000	1,000,000	1,000,000	Audited semiannual INDOTEL report	Financing of equipment for the digitalization of broadcast television.
<b>Output 4:</b> Design and implementation of a communication strategy	Communication strategy	0	2020	1	1	1	1	1	1	Audited semiannual INDOTEL report	The communication strategy should be completed by the third quarter of year 1 at the latest so that its implementation can begin in the fourth quarter of year 2.
<b>Component 2: Broadband connectivity and infrastructure (US\$80 million)</b>											
<b>Output 5: Expansion, provision of equipment, and wiring of backbone, aggregation, and access networks</b>											
<b>Sub-output 1:</b> Expansion of the backbone network and installation of energy-efficient and climate-resilient equipment	Number of municipios provided with the relevant equipment	0	2020	0	2	4	6	8	8	Audited semiannual INDOTEL report	In the municipal district capitals that lack backbone network coverage, the infrastructure required to enable the use of this resource by local providers will be installed.  This will include financing for the deployment of infrastructure, administrative costs, and the operation and maintenance of the proposed solutions for a five-year period.

Indicator	Unit of measurement	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of verification	Comments
<b>Sub-output 2:</b> Expansion of the aggregation network and installation of energy-efficient and climate-resilient equipment	Number of municipios and municipal districts provided with the relevant equipment	0	2020	0	26	26	25	25	102	Audited semiannual INDOTEL report	In the municipios and municipal districts where expansion of the fiber-optic aggregation network is feasible, the infrastructure required to enable the use of this resource by local providers will be installed.  This will include financing for the deployment of infrastructure, administrative costs, and the operation and maintenance of the proposed solutions for a five-year period.
<b>Sub-output 3:</b> Expansion of the access network and installation of energy-efficient and climate-resilient equipment	Number of municipios provided with the relevant equipment	0	2020	0	39	79	118	158	158	Audited semiannual INDOTEL report	In the municipios where installation and expansion of fixed access networks is feasible, the infrastructure required will be installed and access for local providers will be facilitated.  This will include financing for the deployment of infrastructure, administrative costs, and the operation and maintenance of the proposed solutions for a five-year period.
<b>Output 6:</b> Expansion of international connectivity	Indefeasible Rights of Use contracted	0	2020	0	0	0	1	1	1	Audited semiannual INDOTEL report	This will include financing for contracting redundant and/or higher-capacity international connectivity.
<b>Component 3: Digital skills and competencies (US\$4 million)</b>											
<b>Output 7:</b> Digital skills training program on the use of technology and equipment with a gender lens	Number of training programs	0	2020	0	1	1	1	1	1	Audited semiannual INDOTEL report	Pro-gender indicator. Training programs will be offered to the public at schools with Internet connections and community centers.  The training program will include specific activities for training women and girls and closing the gender divide.

Country: Dominican Republic

Division: IFD/CMF

Operation no.: DR-L1147

Year: 2021

## FIDUCIARY AGREEMENTS AND REQUIREMENTS

**Executing agency:** Dominican Telecommunications Institute (INDOTEL)

**Operation name:** Program to Improve Connectivity for Digital Transformation in the Dominican Republic

### I. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

1. Use of country systems in the operation (any system or subsystem that is subsequently approved may be used in the operation in accordance with the terms of its validation by the Bank).

<input checked="" type="checkbox"/> Budget	<input checked="" type="checkbox"/> Reports	<input checked="" type="checkbox"/> Information system	<input type="checkbox"/> National competitive bidding
<input checked="" type="checkbox"/> Treasury	<input type="checkbox"/> Internal audits	<input checked="" type="checkbox"/> Shopping	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Accounting	<input type="checkbox"/> External control	<input type="checkbox"/> Individual consultants	

2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Particular features of fiduciary execution	The Office of the Program Director, which reports to the Office of the Executive Director of INDOTEL, will be responsible for program procurements and financial management.
-------------------------------------	--	--

3. Fiduciary capacity

Fiduciary capacity of the executing agency	<p>The institutional capacity of INDOTEL (the executing agency) was evaluated in February 2021. That assessment determined that its fiduciary capacity for program execution is medium-high. However, the assessment also found that the executing agency does not currently have the procurement and financial management staff needed to take on the fiduciary tasks and that it does not have experience in the execution of projects financed by the Bank or other multilateral agencies. A medium high level of risk was identified in connection with internal processes (see the fiduciary risk and risk response section below). In the last three years, INDOTEL has executed locally funded projects such as the Wi-Fi Access in Public Areas Project and the PuntoGOB Santiago Project (technology component).</p> <p>The findings of the evaluation of the Dominican Republic's public finance management systems conducted in August 2017 and October 2019 indicate that the average extent of development of those systems is medium and that the use of the country systems does not pose any major risk for the execution of IDB-financed projects. The updated diagnostic assessment of the public procurement system carried out in February 2016 using the methodology of the Organisation for Economic Co-operation and Development/Development Assistance Committee (OECD/DAC) found it to be a moderately advanced system with some opportunities for improvement in sanction and oversight mechanisms.</p>
--	---



4. Fiduciary risks and risk response

Area	Risk	Level of risk	Response
Internal processes	Any shortcomings that were to affect the management of bidding processes, the application of the Bank's procurement policies, and/or the program's financial management could delay the preparation of financial reports, which, in turn, could jeopardize the achievement of program objectives within the established time frame.	Medium-high	<ul style="list-style-type: none"> <li>a. Recruitment/assignment of a procurement specialist and an administrative/financial specialist.</li> <li>b. Targeted trainings on IDB policies and fiduciary guidelines for key staff members.</li> </ul>
Internal processes	Insufficient clarity regarding the program's fiduciary management (procurement and financial management) procedures, duties, and/or responsibilities could delay execution, which, in turn, could jeopardize the achievement of program objectives within the established time frame.	Medium-low	The <a href="#">program Operating Regulations</a> will cover fiduciary obligations, procedures, workflows, and internal controls for procurements and financial management.
Planning	Financial quotas that are too low and/or not expedient enough for the program's financial execution could delay program execution, which, in turn, could jeopardize the achievement of program objectives within the established time frame.	Medium-low	Comprehensive planning of program activities and identification of budgetary requirements to ensure that allocations are managed in a timely manner.

5. Applicable policies and guidelines: Financial management: Financial Management Guidelines for IDB-financed Projects (document OP-273-12); disbursement instructions; and instructions for financial reports and management of external audits; procurement: Policies for the Procurement of Goods and Works financed by the Inter-American Development Bank (document GN-2349-15) and Policies for the Selection and Contracting of Consultants financed by the Inter-American Development Bank (document GN-2350-15).

6. Exceptions to policies and guidelines: None.

## II. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE LOAN CONTRACT

<b>Applicable exchange rate for the justification of expenditures incurred in the local currency of the borrower's country:</b> Option (b)(ii) of Article 4.10 of the General Conditions of the Loan Contract: The effective exchange rate on the date of payment of the expenditure in the local currency of the borrower's country.
<b>Type of audit:</b> Audits are to be conducted annually. The program's audited financial statements are to be submitted within 120 days following the closing of each fiscal year. Upon completion of the project, the final audited financial statements are to be submitted within 120 days following the date of the last disbursement.
<b>Other reports:</b> A semiannual unaudited financial performance report is to be submitted within 60 days following the close of the first six-month period of each year.

### III. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

<input checked="" type="checkbox"/>	Bidding documents	Procurements of works, goods, and nonconsulting services in accordance with the Bank's procurement policies (document GN-2349-15) and subject to international competitive bidding (ICB) will use the Bank's standard bidding documents or those agreed upon by the executing agency and the Bank for the procurement process in question. The selection and contracting of consulting services will be conducted in accordance with the Policies for the Selection and Contracting of Consultants (document GN-2350-15) and will use the standard Request for Proposals issued by the Bank or another document agreed upon by the executing agency and the Bank for the selection process in question. The review of technical specifications and the terms of reference for procurements during the preparation of selection processes will be the responsibility of the project's sector specialist. This technical review may be carried out ex ante and is independent of the method used for procurement review.						
<input checked="" type="checkbox"/>	Recurrent expenditures	Recurrent expenditures required to run the project, approved by the Project Team Leader, and financed by the project will be processed in accordance with the executing agency's administrative procedures. These procedures will be reviewed and accepted by the Bank provided that they do not run counter to the principles of economy, efficiency, and competition. At the borrower's request, as part of these expenditures, the program will finance the wages of staff of the Office of the Program Director. This expenditure is deemed to be in accordance with the policy set out in document GN-2331-11 and meets the eligibility and sustainability criteria.						
<input checked="" type="checkbox"/>	Advance procurement and retroactive financing	The Bank may retroactively finance, as a charge against the loan proceeds, up to US\$23 million (20% of the proposed loan amount) in eligible expenditures for the procurement of decoders and receivers in connection with the analog switch-off, including their distribution to beneficiaries and associated logistics costs, in support of activity III of Component 1, provided that requirements substantially similar to those established in the loan contract, including the IDB's policies on safeguards, procurement, and processing of sovereign-guaranteed operations, have been met. Such expenditure will have been incurred on or after the project profile approval date (5 March 2021) but under no circumstances may include expenditures incurred more than 18 months prior to the loan approval date.						
<input checked="" type="checkbox"/>	Procurement supervision	<p>In keeping with the level of fiduciary risk identified for the project and the process in question, supervision of procurement processes can be ex ante or ex post. Ex post reviews will be conducted in accordance with the annual supervision plan and the associated reports will include at least one physical inspection of the procurement processes subject to review. (The inspection will verify the existence of the assets procured; but verification of quality and adherence to specifications will be the responsibility of the sector specialist.) The thresholds for ex post reviews are as follows:</p> <table border="1"> <thead> <tr> <th>Works</th><th>Goods/services</th><th>Consulting services</th></tr> </thead> <tbody> <tr> <td>N/A</td><td>N/A</td><td>Firms: N/A Individuals: US\$50,000</td></tr> </tbody> </table>	Works	Goods/services	Consulting services	N/A	N/A	Firms: N/A Individuals: US\$50,000
Works	Goods/services	Consulting services						
N/A	N/A	Firms: N/A Individuals: US\$50,000						
<input checked="" type="checkbox"/>	Records and files	The executing agency will be responsible for using established procedures to maintain records and supporting documentation for procurement processes and proof of all payments made out of project funds.						

Main procurements

Procurement description	Selection method	New procedures / tools	Estimated date	Estimated amount (US\$)
<b>Goods</b>				
Equipment and infrastructure for the expansion of broadband networks (backbone, aggregation, and access networks)	ICB	Multistage process	Year 2, First Quarter	70,000,000
Telecommunications equipment and infrastructure for the transition from analog to digital television	ICB	Multistage process	Year 2, First Quarter	28,000,000
<b>Nonconsulting services</b>				
Equipment and infrastructure for the expansion of international connectivity	ICB	Multistage process	Year 5, First Quarter	10,000,000
Digital skills training program on the use of equipment and technology with a gender lens	ICB	N/A	Year 1, Fourth Quarter	4,000,000

For more information, see the 18-month [procurement plan](#).

Procedure	Justification for its use
Multistage process	<p>The following procurements may be carried out using multistage processes:</p> <ol style="list-style-type: none"> <li>1. Equipment and infrastructure for the expansion of broadband networks; and</li> <li>2. Telecommunications equipment and infrastructure for the transition from analog to digital television.</li> </ol> <p>In view of the technological changes that are occurring and the different technologies that could be used to meet the program objectives, prior consultations will be held with members of this industry to validate technical and service quality specifications. The bidding documents will be prepared with support from consultants who are experts in these areas.</p>

#### IV. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

☑	Programming and budget	The annual budget is prepared by the Ministry of Finance Budget Office in coordination with the Ministry of Economy, Planning, and Development and other government agencies involved in the budget process. INDOTEL will be responsible for managing program planning and the program budget and will use planning tools for this purpose, including the Bank's tools (the <a href="#">multiyear execution plan</a> , <a href="#">procurement plan</a> , and financial plan).
☑	Treasury and disbursement management	<ul style="list-style-type: none"> <li>▪ The cash flow will be managed in line with a <a href="#">multiyear execution plan</a> and <a href="#">procurement plan</a> that have received the Bank's no objection. Its programming will cover a period of not less than 12 months.</li> <li>▪ The program will use a special bank account in the program's name and in U.S. dollars at the Central Bank, to be administered through a subaccount in the National Treasury Single Account.</li> <li>▪ Disbursement requests will initially be submitted manually, but this may change if the authorities agree to use the Bank's electronic disbursement system at a later date.</li> <li>▪ The transaction currency for the operation will be the U.S. dollar.</li> <li>▪ The exchange rate to be used for this operation will be the effective exchange rate on the date of payment of the expenditure in the local currency (option (b)(ii) of Article 4.10 of the General Conditions of the Loan Contract).</li> <li>▪ The primary disbursement modality to be used for the program will be advances of funds based on financial planning for up to six months. For this operation, supporting documentation will be provided for 80% of the total cumulative balances pending justification. e.</li> </ul>
☑	Accounting, information systems, and reporting	The program will follow International Public Sector Accounting Standards (IPSAS). The Integrated Financial Management Module for the Execution Units of Projects with External Financing (UEPEX) of the country's Integrated Financial Management System (SIGEF) will be used as the technological platform for accounting records, which will be kept on a cash basis. All of the program's key financial reports, including disbursement requests, will be generated directly by this system. The <a href="#">program Operating Regulations</a> , which document workflows and internal controls, will be used alongside the applicable policies and guidelines.
☑	Internal control and internal audit	The Office of the Comptroller General of the Dominican Republic is responsible for the government's internal audit function, supported by internal auditing units at each agency of the country's public administration.
☑	External control and financial reports	<p>The borrower and/or the executing agency will select and contract external auditing services in accordance with the terms of reference previously agreed upon by the executing agency and the Bank. The terms of reference will establish the type of review, its timing, and its scope. The external auditor that is selected and the auditing standards to be applied will be acceptable to the Bank. In line with the nature and risk profile of the operation, the program will be required to prepare financial statements audited preferably by a firm with an eligibility+ rating. The type of audit and the eligibility rating of the auditors can be changed over the course of the project depending on the findings of the Bank's supervision.</p> <p>The following audited financial statements will be required:</p> <ul style="list-style-type: none"> <li>▪ Annually: Audited financial statements are to be submitted to the Bank within 120 days following the close of each fiscal year (31 December).</li> <li>▪ Upon project completion: An audited financial statement is to be submitted to the Bank within 120 days of the date of the last disbursement.</li> </ul> <p>Other reports: A semiannual unaudited financial performance report is to be submitted</p>

		within 60 days following the close of the first six-month period of each year.
<input checked="" type="checkbox"/>	Financial supervision	The financial specialist will be responsible for carrying out regular (at least once per year) on-site and desk reviews and support, subject to change during program execution. Supervision will consist of monitoring the implementation status of activities recommended for capacity-building of the unit, the status of fiduciary arrangements, ex post reviews, inspection visits, and ongoing dialogue and other forms of communication with the executing agency. Supervision will also take place through the annual financial audits.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/21

Dominican Republic. Loan \_\_\_\_/OC-DR to the Dominican Republic  
Program to Improve Connectivity for Digital Transformation  
in the Dominican Republic

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Dominican Republic, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Program to Improve Connectivity for Digital Transformation in the Dominican Republic. Such financing will be for the amount of up to US\$115,000,000 from the resources of the Bank's Ordinary Capital and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_ 2021)