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ARGENTINA

**PROGRAM FOR STRENGTHENING THE DIGITAL AGENDA:
CONNECTIVITY, ELECTRONIC GOVERNMENT, AND DIGITAL PRODUCTIVE TRANSFORMATION**

(AR-L1304)

LOAN PROPOSAL

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ABBREVIATIONS

ANC	Autoridad Nacional de Competencia [National Competition Authority]
BIM	Building information modeling
DPPEESA	Dirección de Programas y Proyectos Especiales con Enfoque Sectorial Amplio [Office of Special Programs and Projects with a Sector-wide Approach]
ECLAC	Economic Commission for Latin America and the Caribbean
EDM	Electronic document management
ENACOM	Ente Nacional de Comunicaciones [National Communications Agency]
e-SIDIF	Sistema Integrado de Información Financiera [Integrated Financial Information System]
ICT	Information and communication technologies
IMF	International Monetary Fund
INAP	Instituto Nacional de Administración Pública [National Public Administration Institute]
INPI	Instituto Nacional de la Propiedad Industrial [National Industrial Property Institute]
INTAL	Institute for the Integration of Latin America and the Caribbean
IOT	Internet of Things
ISTR	Internet Security Threat Report
ITU	International Telecommunication Union
LAC	Latin America and the Caribbean
NRI	Networked Readiness Index
OECD	Organization for Economic Cooperation and Development
OSI	Online Service Index
PBP	Programmatic policy-based loan
SBA	Standby arrangement
SMEs	Small and medium-sized enterprises
TFP	Total factor productivity
UIA	Unión Industrial Argentina [Argentine Industrial Union]
WEF	World Economic Forum

PROJECT SUMMARY
ARGENTINA
PROGRAM FOR STRENGTHENING THE DIGITAL AGENDA:
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(AR-L1304)

Financial Terms and Conditions				
Borrower: Argentine Republic			Flexible Financing Facility^(a)	
			Amortization period:	20 years
Executing agency: Argentine Republic, acting through the Ministry of Finance			Disbursement period:	1 year
			Grace period:	5.5 years ^(b)
Source	Amount (in US\$)	%	Interest rate:	LIBOR-based
			Credit fee:	^(c)
IDB (Ordinary Capital):	300 million	100%	Inspection and supervision fee:	^(c)
			Weighted average life (WAL):	12.75 years
Total:	300 million	100%	Currency of approval:	United States dollars
Project at a Glance				
<p>Project objective/description: The general objective of the program is to improve the productivity of the Argentine economy by advancing its digitalization through actions to: (i) establish a digital agenda; (ii) strengthen the legal framework for connectivity; (iii) broaden offerings and improve the quality of digital government services; and (iv) promote policy measures for digital productive transformation.</p> <p>This loan operation is the first in a programmatic series of two consecutive, single-tranche operations that are technically related but financed independently under the programmatic policy-based loan (PBP) modality.</p>				
<p>Special contractual conditions precedent to the sole disbursement of the loan: Disbursement of the loan proceeds is contingent on the borrower's fulfillment, to the Bank's satisfaction, of the policy reform commitments as established the Policy Matrix (Annex II), the Policy Letter, and the conditions established in the loan contract (see paragraph 3.2).</p>				
Exceptions to Bank policies: None.				
Strategic Alignment				
Challenges:^(d)	SI	<input checked="" type="checkbox"/>	PI	<input checked="" type="checkbox"/>
Crosscutting themes:^(e)	GD	<input type="checkbox"/>	CC	<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 in the amortization schedule, as well as currency and interest rate 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 relevant policies.

^(d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(e) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem to be addressed, and rationale

1. Macroeconomic context

- 1.1 **Macroeconomic context in Argentina.** The economic reform challenges, adverse external financial shocks, and lengthy drought faced by the country early in 2018 contributed to a decline in economic activity. Projections were for the economy to contract by 2.6% in 2018 after growing 2.9% in 2017, and for annual inflation to reach 47.5% by year-end 2018. The Argentine peso experienced great volatility in 2018 and depreciated by about 45% between January and mid-November 2018. On the fiscal front, the 2018 primary deficit was expected to be 2.6% of GDP. Confronted with this situation, the Argentine government responded quickly, adjusting its macroeconomic policy framework and garnering the support of the international community. The government's priorities included accelerating fiscal consolidation, restoring the external balance, and achieving price stability. The standby arrangement (SBA) with the International Monetary Fund (IMF) was particularly instrumental for the implementation of the government's financial program, while preserving fiscal headroom for social policies to offset the potential social costs of stabilization. The SBA with the IMF initially provided for an amount of US\$50 billion and a term of 36 months, but was modified in September 2018 when Argentina faced a rise in financial volatility. The new program increased the IMF funding by US\$7.1 billion and accelerated the disbursements of funds. The government has committed to achieving a primary fiscal balance in 2019 and a surplus of 1.1% of GDP in 2020. According to the IMF,¹ increasing the country's resilience requires maintaining macroeconomic stability, strengthening the regulatory and institutional framework, raising the productivity of the Argentine economy, reducing poverty, and promoting inclusive growth.
- 1.2 **Impact of digitalization on productivity and macroeconomic development.** Digitalization is transforming our societies and economies by changing the ways people interact, companies operate and innovate, and governments design and implement their policies. The size and speed of this change are unprecedented and require economies and societies to adapt constructively and in time.² Access to new information and communication technologies (ICTs) in the countries of Latin America and the Caribbean (LAC) has been slow and partial, leading to low coverage levels, limited digitalization of public services, and limited digital transformation of the production sector.³ As a result, the region has failed to

¹ IMF (2017), Article IV.

² Navarro, Juan Carlos (2018). The digital transformation imperative: An IDB science and business innovation agenda for the new industrial revolution. Washington, D.C.

³ Ibid.

harness the social and economic potential of these technologies.⁴ Empirical evidence has shown, for example, that broadband access plays an important role in fostering innovation and improving productivity, particularly if its use is extended to complex activities.^{5,6} Digitalization of the economy leads to increases in productivity and economic growth: a 1% increase in the digitalization index (comprised of variables related to infrastructure, service connectivity, technology use, and regulatory framework) results in an estimated 0.32% increase in GDP, 0.26% increase in labor productivity, and 0.23% increase in total factor productivity (TFP).⁷ For the private sector, adopting ICTs enables and accelerates technological development and innovation to sustainably improve productivity through optimization of production processes and development of new competitive advantages.⁸ Productivity results from technological advances and innovation all along the value chains, from development of new business processes and models with greater value-added, and from learning and talent accumulation. At present, technological advances and innovation are largely the result of increasing connectivity⁹ via broadband¹⁰ and leveraging the opportunities offered by new, exponential disruption technologies.¹¹

- 1.3 **Digitalization and productivity in Argentina.** In the last two decades, Argentina's TFP has been just 64% of U.S. TFP (Penn World Table 8.0, 2014).¹² In addition, the country is still far behind more developed nations in terms of ICTs,

⁴ The literature shows that investments in ICT have been responsible for much of the productivity growth in the United States since 1995. In LAC, a recent study by the Economic Commission for Latin America and the Caribbean (ECLAC) (Hofman, Aravena, and Aliaga, 2016. TIC y su impacto en el crecimiento económico de América Latina, 1990-2013 [ICTs and their impact on economic growth in Latin America, 1990-2013]) showed that the widening gap in capital investments in ICT is the factor most powerfully (adversely) affecting the region's differential in labor productivity with respect to the United States over the last quarter century.

⁵ Grazzi, M., Jung, J. 2016. Information and communication technologies, innovation, and productivity: Evidence from firms in Latin America and the Caribbean. In: Inter-American Development Bank, Grazzi, M., Pietrobelli, C. (eds.), Firm innovation and productivity in Latin America and the Caribbean. Palgrave Macmillan, New York.

⁶ The impact on productivity from adopting ICTs can be increased if combined with complementary investments in human capital and organizational adjustments (Brynjolfsson, E., Hitt, L. M. 2000. Beyond computation: Information technology, organizational transformation and business performance. The Journal of Economic Perspectives 14(4): 23-48.

⁷ See: La digitalización. Una clave para el futuro crecimiento de la productividad [Digitalization: A key for future productivity growth]. Centro de Estudios de Telecomunicaciones de América Latina.

⁸ Innovation, Science, and Technology Sector Framework Document (document GN-2791-8). Grazzi, M.; Pietrobelli, C. Firm innovation and productivity in LAC, IDB 2016. Chapter 4. "ICT, innovation and productivity."

⁹ Different technological advances and innovations require certain connectivity conditions for new use cases (e.g., Industry 4.0). See: The future of connectivity: Enabling the IOT. McKinsey.

¹⁰ Broadband connectivity services are telecommunications services that enable access, meeting high standards of quality, availability, security, speed, and reliability, to digital services and content using 4.0 technologies that require the transfer of large data volumes at speeds of around 25 Mbps and higher, such as high-definition video, interactive virtual reality, enhanced reality, remote work environment, distance education environment, and videocalling.

¹¹ For a description of disruptive technology applications, see IDB. 2018. Exponential disruption in the digital economy.

¹² The 4.5% growth in productivity over the past decade (accounting for more than 60% of GDP growth) merely offsets the decline in productivity in the second half of the 1990s.

as shown by its 51st place ranking out of 176 countries on the 2017 ICT development index published by the International Telecommunication Union (ITU), particularly the subindexes for “Use” (52nd place) and “Access” (64th place).¹³ Similarly, the ICT pillar of the IDB’s Digital Economy Index ranks Argentina 38th out of 58 countries.¹⁴ Argentina also has a productivity gap with respect to more developed countries.

- 1.4 **Continuing challenges and proposed reforms.** On one hand, Argentina has room for continued progress in digitalizing the economy, particularly in terms of access to, and use of, digital technology tools. On the other hand, productivity growth is the great challenge faced both by Argentina and by the region on the way to converging with the living standard of the advanced economies.¹⁵

2. Digital strategy

- 1.5 **Digital strategy and productivity.** A digital agenda, digital strategy, or ICT digital strategy seeks to maximize the economic and social dividends of ICTs by implementing various initiatives related to the digital economy and ICT promotion. These initiatives range from supply-side policies that expand broadband coverage to demand-side policies that favor ICT competition and affordability, along with e-government, e-health, and e-commerce initiatives and initiatives in the use of ICTs by companies and the general public.¹⁶ The interinstitutional coordination mechanisms inherent in a national digital strategy facilitate the efficiency of public actions to promote digitalization of the economy and of society. At the same time, the objectives and monitoring and evaluation frameworks promote achievement of the digital agenda milestones within the committed time frames. A study conducted by the European Commission estimated that the digital reforms adopted up to that time would have an impact of 1% on long-term economic growth and the expected growth target would be 2.1% of GDP growth above the baseline.¹⁷ Along similar lines, the study estimated that implementing the Digital Agenda for Europe would enable GDP growth of 5% over a period of 8 years and create 1.2 million jobs in the short run and 3.8 million jobs in the long run.¹⁸
- 1.6 **Status of digitalization and productivity in Argentina.** The groundwork was laid for the Argentine Digital Agenda (November 2018) with the issuance of Decree 996/2018 and Resolution 138-SGM#JGM/18 (January 2019). As part of Argentina’s admission application process, the OECD¹⁹ supports the government

¹³ [ICT development index](#). ITU. 2017.

¹⁴ [Índice de Economía Digital](#) [Digital Economy Index]. IDB.

¹⁵ Without productivity growth, there is a risk that the average annual GDP growth over the next 15 years will shrink by 40%-50% in Argentina and the region as a whole. McKinsey Global Institute. 2017. Where will Latin America’s Growth Come From? April 2017.

¹⁶ [Broadband Policies for Latin America and the Caribbean – A Digital Economy Toolkit](#). Organization for Economic Cooperation and Development (OECD) and IDB. 2016.

¹⁷ [The Economic Impact of Digital Structural Reforms](#). Lorenzani D. and Varga J. European Commission. 2014.

¹⁸ [Digital Agenda for Spain. Ministry of Industry, Energy, and Tourism](#).

¹⁹ All OECD countries have a digital agenda, while only half of the Latin American and Caribbean region has a current digital agenda. See: Prats, J. and Puig, P. (2017). La gobernanza de las telecomunicaciones: Hacia la economía digital [Telecommunications governance: Toward the digital economy]. Monograph 571, Washington D.C.: IDB.

through recommendations based on international good practices for the development of a future digital agenda. These recommendations are set out in the Recommendation of the Council on Digital Government Strategies²⁰ and are summarized in 12 of the principles²¹ outlined in the Digital Government Toolkit.²²

- 1.7 **Outstanding challenges and proposed reforms.** The government has decided to make digital transformation a driver in improving the productivity and competitiveness of its economy, and Argentina has a digital agenda to strategically and effectively structure and coordinate the various initiatives required for digital transformation. The government has fully laid the groundwork for a digital agenda to provide strategic direction, coordination, and monitoring of digital transformation actions in a number of sectors, defining: (i) key areas of action; (ii) responsible parties; and (iii) governance structure. The digital agenda calls for a series of actions that may be grouped into three blocks: (i) regulatory and institutional framework for digital connectivity infrastructure; (ii) digital government services; and (iii) digital productive transformation. The actions to be undertaken within each of these blocks are described below.

3. Digital connectivity

- 1.8 **Digital connectivity and productivity.** The development of digital connectivity infrastructure is based on institutions and regulations that: (i) establish a solid and credible framework for investors that recognizes the convergence of services over digital technologies; and (ii) combine competition in services with digital inclusion of disadvantaged individuals and territories.²³ A country that advances toward the creation of a solid regulatory environment has, on average, broadband penetration levels 7.7% higher than a country that has not adopted such measures.²⁴ In Latin America and the Caribbean, on average, a 10% increase in broadband penetration is associated with a 3.19% increase in GDP, a 2.61% increase in productivity, and 67,016 new jobs.²⁵
- 1.9 **Status of digital connectivity and productivity in Argentina.** Argentina is ranked very low in international indicators of connectivity capacity (89th out of 142 countries in the 2016 Network Readiness Index (NRI) published by the World Economic Forum (WEF)) and economic competitiveness (104th out of 142 countries).²⁶ In evaluations conducted by some of the principal private-sector

²⁰ [Recommendation of the Council on Digital Government Strategies. OECD](#). 2014.

²¹ Twelve principles to support the development and implementation of digital government strategies: (i) openness, transparency, and inclusion; (ii) engagement and participation in policy design and in public service delivery; (iii) creation of a data-driven culture in the public sector; (iv) protecting privacy and ensuring security; (v) leadership and political commitment; (vi) coherent use of digital technology across policy areas; (vii) effective organization and governance frameworks to coordinate; (viii) strengthening of international cooperation with governments; (ix) development of clear business cases; (x) reinforce ICT project management capabilities; (xi) procurement of digital technologies; and (xii) legal and regulatory framework.

²² [Digital Government Toolkit](#). OECD.

²³ Ibid.

²⁴ ITU (2015). Trends in Telecommunication Reforms 2015, Geneva: ITU.

²⁵ [Socioeconomic Impact of Broadband in Latin American and Caribbean Countries](#). García Zaballos, A. and López-Ribas, R. IDB. 2012.

²⁶ [Networked Readiness Index](#). WEF. 2016.

participants in the telecommunications industry, Argentina also lags far behind countries with a more developed mobile connectivity infrastructure. Examples include the infrastructure subindex of the Mobile Connectivity Score Index 2017, where Argentina is ranked 53rd out of 163 countries,²⁷ and the Global Connectivity Index, where it is ranked 55th out of 79 countries.²⁸

- 1.10 **Regulatory and institutional framework for connectivity in Argentina.** The sector's legal framework is governed by the Audiovisual Communication Services Law of 2009 (Law 26,522) and the Digital Argentina Law of 2014 (Law 27,078). The institution responsible for public policy in ICT is the Office of the Undersecretary for Digital Government, which is part of the Office of the Secretary for Digital Government and Technological Innovation of the Office of the Government Secretary for Modernization, which reports to the Cabinet Chief. Other institutions falling under the aegis of the Office of the Cabinet Chief in the information and communications sector include national communications agency Ente Nacional de Comunicaciones (ENACOM); Empresa Argentina de Soluciones Satelitales Sociedad Anónima (ARSAT), a State-owned satellite operator with exclusive rights to operate in certain satellite positions and bandwidths that provides services to the State as well as to other telecommunications operators; and Correo Oficial de la República Argentina Sociedad Anónima (CORASA), popularly known as Correo Argentino, a State-owned provider of public telegraph, postal, and monetary services nationwide and internationally. In addition, antitrust responsibilities, which fall to the Ministry of Production and Labor (and its predecessor institutions), have been delegated to the Comisión Nacional de Defensa de la Competencia [National Commission for the Defense of Competition] (CNDC). Certain events in recent years have rendered some elements of the regulatory and institutional framework obsolete.²⁹ For example, technological convergence, which allows a multiplicity of ICT and audiovisual services to be provided over broadband, is changing the traditional telecommunication markets through the arrival of new companies and new business models. These are often beyond the scope of the regulatory and institutional framework because, among other reasons, the framework's mandate is still subject to definitions of services based on the traditional underlying technology, thus drawing distinctions between markets that have now converged.³⁰ Argentina needs to improve the regulatory and institutional framework for connectivity, as it is now ranked 124th out of 139 countries in the NRI's Environment subindex. To cite another comparative example, in the Strategic Regulation dimension of the Bank's Broadband Development Index, Argentina earns 6.05 points of a possible total of 8, thus

²⁷ [Mobile Connectivity Index](#). Global System for Mobile Communications Association (GSMA). 2017.

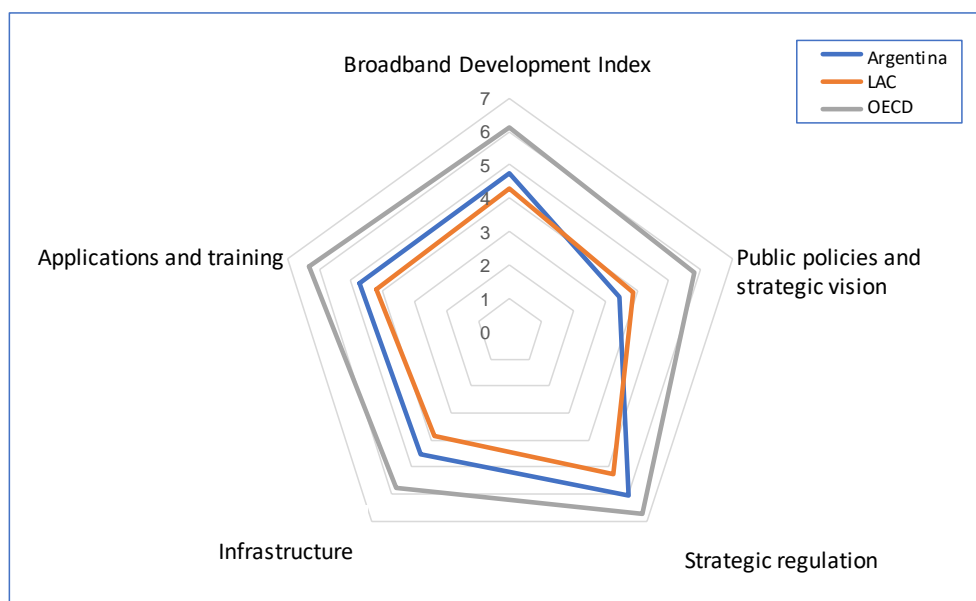
²⁸ [Global Connectivity Index](#). Huawei. 2017.

²⁹ Such is the case of Law 25,156 of 1999, which established the obligation to report transactions exceeding a certain amount stated in pesos to the antitrust authority. The result is that, due to the currency devaluation, a large number of transactions that are insignificant from an antitrust standpoint are being reported and examined.

³⁰ Such is the case of Law 27,078, which allows ICT service licensees to offer audiovisual communication services, and vice versa, with the exception of services provided through a satellite link, thus establishing differences in restrictions: for example, between a cable television provider and a satellite television provider.

scoring below the OECD (6.72), Brazil (6.42), Colombia (6.32), and Chile (6.12),³¹ but above the LAC average, as shown in Figure 1.

Figure 1. Broadband Development Index 2016



Source: DigiLAC. IDB.

- 1.11 **Outstanding challenges and proposed reforms.** The digital connectivity challenges facing Argentina include: (i) the legal and institutional framework does not sufficiently encourage investment in digital connectivity infrastructure;³² (ii) industry regulations do not sufficiently encourage competition in digital services;³³ and (iii) the management policies of the radio-frequency spectrum do not sufficiently encourage maximizing its use to approach the goal of universal access to telecommunication services, among other objectives.³⁴

4. Electronic government and digital government

- 1.12 **Electronic government and productivity.** Improving the delivery of public services in terms of speed, simplification, and automation is essential for boosting productivity in the region.³⁵ In fact, in one of its public policy reports, the OECD indicates that red tape is a cost for businesses and the general public, not only in terms of time and money but also because it erodes productivity and innovation in business activities.³⁶ In Argentina, the average time it takes to complete a formality

³¹ [Broadband Development Index](#). IDB. 2017.

³² Among other things, Law 27,078 does not provide a detailed outline of the principles for infrastructure sharing among ICT service licensees.

³³ Among other things, numerical portability of the fixed telephony system has not been implemented.

³⁴ Among other things, migration to digital terrestrial television and analog switch-off, enabling the radio-frequency spectrum currently dedicated to analog television to be dedicated to mobile communications (e.g., broadband), have not been completed.

³⁵ See op. cit. 2.

³⁶ [OECD, January 2007. Policy Brief.](#)

(4.8 hours), while shorter than the regional average (5.4 hours), is quite long in comparison to the regional leader, Chile (2.2 hours).³⁷

- 1.13 **Status of electronic government and productivity in Argentina.** To date, more than 90% of the federal government has implemented electronic document management (EDM), a tool promoted by the Undersecretariat for Modernization to digitize the internal processes of public agencies, eliminating the use of paper. To be able to implement this tool, advances in digital signature have been made within the government, and the fact that almost the entire government administration is using the same document management system will facilitate communication and information sharing between agencies. This has become a fully necessary basis for integrating the rest of the management systems, both financial and nonfinancial, such as the procurement management systems (COMPR.AR, CONTRAT.AR) and the human resource management system (SARAH) and works and services module (LOyS), as well as for modernizing the e-SIDIF Integrated Financial Information System. In this context, efforts to ensure that these systems are able to interoperate have resulted in an institutional framework that allows data exchange through web services.
- 1.14 In terms of cybersecurity, Argentina has made significant strides. It is the first country in the region to have deployed a Computer Security Incident Response Team (CSIRT), and it has been making efforts to address the rise in computer crime³⁸ and expand the availability of electronic government services. However, despite efforts to remove red tape in and digitize public government administration, Argentina is ranked 58th out of 193 countries in the 2018 United Nations Online Service Index (OSI), behind Brazil, Mexico, Uruguay, Colombia, Chile, and Peru.³⁹ The OSI measures the quality and scope of online services, which suggests that Argentina's efforts to simplify processes have not translated into a better online experience for the general public. New technologies that could enable dramatic improvements in service to the public are slowly being tested. This specifically includes the use of blockchain in procurement, which has led to the creation of the Federal Blockchain Network and the use of artificial intelligence tools to provide services to the citizenry. While the Government of Argentina has made considerable advances in the use of digital media to reduce and streamline red tape, a transition toward digital government requires measures that foster greater use of online government services by the general public. In particular, to consolidate electronic government and be able to transition to digital government, with disruptive technologies facilitating public-sector modernization and digital transformation,⁴⁰ the following is required: (i) improving data security for citizens wishing to complete transactions online; (ii) reducing technical barriers and other costs in time and resources related to information sharing among public agencies; (iii) improving the public sector's capacity to implement a coherent and consistent portfolio of online services; and (iv) promoting the use of emerging technologies to improve the quality of the user's experience when accessing online services.

³⁷ [Source: "Wait no more: Citizens, red tape, and digital government." IDB, 2018.](#)

³⁸ In 2017, Argentina was the region's country where the second-largest number of attacks on Internet-of-Things terminals originated. Internet Security Threat Report (ISTR) 2018. Symantec.

³⁹ [Source: UN E-Government Knowledgebase.](#)

⁴⁰ OECD (2016), Digital Government Strategies for Transforming Public Services in the Welfare Areas.

- 1.15 **Outstanding challenges and proposed reforms.** In view of the above, the following challenges have been identified as hindering the development of digital government in Argentina: (i) current mechanisms to protect the security of critical infrastructure and data of individuals and businesses are inadequate; (ii) dispersed government efforts prevent a consistent supply of online services designed with individuals and businesses in mind; and (iii) there is limited use of technologies to improve the quality of public services in the country.

5. Digital productive transformation

- 1.16 **Digital productive transformation and productivity.** Technological development and innovation are key factors for achieving sustained productivity improvements by optimizing and developing sustained competitive advantages. It has been shown how the adoption of digital technologies is transforming the production sectors and business models, helping to speed up communication and information processing within companies, reduce operation, coordination, and transaction costs, and facilitate and enhance the effectiveness of decision-making processes. In addition, adopting ICTs enables the development not only of new products but also of better communication channels throughout the production and marketing chain, creating synergies and boosting the capacity for innovation.^{41 42} However, the pace of adoption of new digital technologies by businesses and governments in Latin America is turning out to be much slower than expected. This means that the region's countries are failing to take advantage of opportunities arising from digital transformation and related to: (i) efficiency gains and cost reductions; (ii) improvements in the quality and deployment of public services; (iii) environmental impact reduction and other improvements in social welfare; and (iv) gains for the production sector in terms of new economic opportunities and potential to innovate. The government needs to promote digital transformation, since: (i) there are significant failures of public-private and public-public coordination that require an active facilitation role to be resolved;⁴³ (ii) many of these needs tend to be sector-specific, so that a crosscutting approach to public service delivery would not succeed in addressing them; (iii) the weight of the State in demanding and adopting new technologies could be the driving force for the digital transformation process in the private sector and among the general public; (iv) companies, particularly smaller businesses, face severe information and knowledge asymmetries that prevent them from making the necessary adjustments by themselves; and (v) the low digitalization levels of businesses are leading to losses in productivity and competitiveness, and thus lower tax revenue.

⁴¹ Navarro, Juan Carlos (2018). The digital transformation imperative: An IDB science and business innovation agenda for the new industrial revolution. Washington D.C.

⁴² Grazzi M., Jung J. (2016). Information and Communication Technologies, Innovation, and Productivity: Evidence from Firms in Latin America and the Caribbean. In: Inter-American Development Bank, Grazzi M., Pietrobelli C. (eds.), Firm Innovation and Productivity in Latin America and the Caribbean. Palgrave Macmillan, New York.

⁴³ Examples of this include setting interoperability standards and other regulations and defining connectivity and human capital development needs, which cannot be done efficiently by each of the respective stakeholders on its own.

- 1.17 Status of digital productive transformation and productivity in Argentina.** In the production processes digitalization index, Argentina (46.4) lags with respect to Chile (54.4) and Colombia (48.6). The same is true of the index measuring the capacity to implement digital transformation in the production sector (Argentina 43.3; Chile 47.9; Mexico 47.3; and Colombia 45.7).⁴⁴ The results of the WEF's NRI show that Argentina is ranked 89th out of 139 countries, a lower relative position than that of other countries in the region, such as Uruguay (43rd), Costa Rica (44th), Panama (55th), Trinidad and Tobago (67th), and Colombia (68th). Argentina's ranking in the ICT business usage pillar is even lower (103rd), particularly in the components measuring firm-level technology absorption (115th), ICT use for biz-to-biz transactions (120th), extent of staff training (88th), and internet use for biz-to-consumer transactions (76th).⁴⁵ This situation shows significant potential for hastening the introduction of new technologies in the country. According to a recent survey by the Institute for the Integration of Latin America and the Caribbean (INTAL) and the Argentine Industrial Union (UIA),⁴⁶ less than 3% of the surveyed Argentine businesses use 4.0 technologies and only about 15% believe they will be using these technologies in 10 years. Another survey published in 2018 shows that only 34% of Argentine companies have plans to introduce Industry 4.0 technologies, compared to more than 70% in advanced countries such as France and Germany.⁴⁷
- 1.18 Outstanding challenges and proposed reforms.** The digital transformation of the production sector is a complex process involving a combination of numerous components, stakeholders, and actions that go beyond access to and automation of production processes and entail a radical transformation in business operations and the way businesses interact with the rest of the production and marketing chain and relate to customers and government. Thus, addressing this process requires a comprehensive vision and calls for (horizontally) crosscutting actions aimed at: (i) fostering digital transformation of businesses, particularly small and medium-sized enterprises (SMEs); (ii) improving their capacity to develop digital technology-based innovation; and (iii) promoting the development of specialized digital skills for technological transformation:
- a. Digital transformation of businesses.** Businesses in general have been boosting their technology adoption capacity. However, recent studies in Latin America and the Caribbean show that smaller businesses have a lower digital technology adoption rate than larger businesses.⁴⁸ In fact, smaller businesses tend to use this technology for the most basic services (email, online searches, or online monetary transactions) but not for purposes such as

⁴⁴ Calculations for 2014. Katz, R. (2018). La digitalización: Una clave para el futuro crecimiento de la productividad en América Latina [Digitalization: A key for future productivity growth], Centro de Estudios de Telecomunicaciones de América Latina.

⁴⁵ WEF (2016). The Global Information Technology Report 2016. Innovating in the Digital Economy. Geneva.

⁴⁶ The survey commissioned by INTAL and UIA covered 300 businesses in 6 manufacturing industries with a view to measuring digital gaps in the country's production sector.

⁴⁷ Boston Consulting Group (2018). Fostering the development of Industry 4.0 in Argentina.

⁴⁸ Grazzi M., Jung J. (2016). Information and Communication Technologies, Innovation, and Productivity: Evidence from Firms in Latin America and the Caribbean. In: Inter-American Development Bank, Grazzi M., Pietrobelli C. (eds.), Firm Innovation and Productivity in Latin America and the Caribbean. Palgrave Macmillan, New York.

business analysis, marketing and customer relations through social media, or smart inventory and delivery management.⁴⁹ In the aforementioned INTAL/UIA survey, SMEs cite lack of access to finance, cultural barriers, and unfamiliarity with the technology as the primary obstacles to the adoption of digital technologies. Designing and implementing initiatives aimed at making it easier to close this gap is essential in fostering this transformation (see paragraph 1.32.a).

- b. **Digital technology-based innovation.** Businesses in Latin America and the Caribbean are not yet leveraging digital technology access, adoption, and use toward innovation. Although they tend to have access to broadband and email, this does not necessarily translate into innovation activities. According to a CISCO survey, only 17% of the large companies surveyed in Latin America and the Caribbean were carrying out or starting Internet of Things (IOT) projects in 2016.⁵⁰ In Argentina, while the national innovation system is among the most advanced in the region, it is still far from leading a productivity boosting process based on innovation.⁵¹ As in other countries in the region, the production sector in Argentina faces limitations in capitalizing on the benefits of digital technologies for innovation, not only in terms of access to finance but also in terms of information on the benefits, quality, and typology of the various technologies and the availability and reliability of technology and knowledge providers (universities, other businesses, research and development centers, consultants). In recent years, many private and public-private projects have run into various rigid regulations governing the testing, piloting, and scaling of the new products and services. Thus, what is required is to adjust the regulatory framework to adapt it to the new needs, enabling regulatory testbeds and sandboxes that can accommodate this new type of innovation. In addition, within this set of new disruptive technologies, artificial intelligence presents strategic opportunities for the country. Argentina not only is a large consumer of what artificial intelligence offers to improve the production of goods and services, but it also has several research groups well positioned to lead the provision of artificial intelligence services in the Spanish-speaking world. It is essential for the country to develop and implement a national artificial intelligence plan in order to ensure a coordinated and integrated vision for these efforts (see paragraph 1.32.b).

⁴⁹ IDB, 2017.

⁵⁰ See: [Networking Skills in Latin America](#).

⁵¹ In 2015, Argentina devoted 0.63% of GDP to research and development, while the OECD average was 2.4% and the most innovative countries, such as Israel or Korea, allocated 4% (source: <http://indicadorescti.mincyt.gob.ar> and www.oecd.org).

c. **Digital transformation in vertical sectors (knowledge economy, construction, and finance)**⁵²

- (i) **Knowledge-based services sector.**⁵³ This sector is comprised of some 45,000 businesses, 99% of which are SMEs, and employs more than one million workers.⁵⁴ The sector has the potential to grow even faster if some of its bottlenecks, such as access to skilled labor, are eliminated. It also has the potential to transform other sectors of the economy due to the crosscutting nature of knowledge-based services, particularly those related to software and computer services. Thus, what is required is to move forward in outlining a comprehensive vision for the sector that prioritizes regulatory reforms and fosters the development and adoption of new technologies, skills training, and development of startups.
- (ii) **Construction sector.** This sector is a potential contributor to dynamic growth in Argentina. The sector accounts for 4% of GDP and, as in other countries in the region, poses productivity, cost overrun, delay, and quality challenges associated with lack of coordination in the design, execution, and supervision of projects and limited technological innovation and technology adoption, among other factors. The use of technologies such as building information modeling (BIM) is changing the way construction is carried out worldwide, creating significant cost and time savings and improving asset management, transparency, and traceability in the construction processes. In Argentina, the development of BIM is still incipient, among other reasons because the country has yet to implement policies to enable and encourage a rapid spread of these technologies, such as setting of national standards, mass use in public works, etc. Thus, it is essential to move forward on crafting a policy framework that can support their implementation, as well as develop plans and protocols to enable the use, and take advantage of the benefits, of these technologies.
- (iii) **Financial sector.** The adoption of ICTs is leading to new business models (e.g., FinTech) and actors with limited presence in the sector's institutions. Similarly, not all new ICT-based services (e.g., digital means of payment, crowdfunding) enjoy technical standards that can ensure interoperability or have regulations (e.g., crowdfunding) that can guarantee basic rights and promote competition in the sector.

d. **Talent promotion for digital transformation.** Globalization and digital technologies are changing business activities and thus the skills required of a large part of the workforce, as well as the nature of the workplace.⁵⁵ Over most

⁵² In dialogue with the government it was decided to prioritize these sectors in the program due to their significance for the Argentine economy and the considerable benefits they are likely to derive from digital transformation (see paragraph 1.32.c).

⁵³ Includes business, professional, and technical services, computer and data services, and audiovisual services.

⁵⁴ Observatorio de la Economía del Conocimiento [Knowledge Economy Observatory], Ministry of Production and Labor.

⁵⁵ The Future of Jobs (World Economic Forum, January 2016).

of the past decade, digital skill-intensive sectors have experienced a level of demand for workers with those skills that exceeds the available supply. In view of this, in 2016 the government launched an expedited skill training program known as Program 111,000.⁵⁶ Despite its achievements, the program's massive size and novelty resulted in some difficulties, mostly related to the high dropout rate of participants and differences between the profile of graduates and the specific demands of businesses. Thus, what is required is to review this experience and fine-tune it so that it can meet the proposed objectives (see paragraph 1.32.d).

6. Problem to be addressed, the Bank's experience and support, lessons learned, and strategic alignment

- 1.19 **Summary of reforms.** The policy actions of programmatic operation I prioritize the development of policy frameworks (e.g., objectives and governance structure of strategies, draft laws and regulations, technical reports, strategy proposals, good practices, interoperability standards, manuals, collaboration agreements, models, occupational maps, working groups, technical guidelines, and guidelines for national plans) to improve the policy framework and institutions that will facilitate the digital transformation of the economy, as a key part of capitalizing on the advantages of ICTs. The actions under programmatic operation II largely prioritize the initial implementation of the Argentine Digital Agenda and related planned reforms (e.g., modernization of the legal and regulatory framework, use and evaluation of ICT tools in the public sector, getting institutions and programs up and running), ensuring that the means of verification for programmatic operation II are robust, balanced in relation to programmatic operation I, and can be completed within the planned execution period. Taken together, the measures under programmatic operations I and II will contribute to closing the existing gaps: (i) development of a digital agenda to structure public policy on governance, as established by OECD best practices; (ii) introduction of a new legal framework that acknowledges technological convergence, regulates competition, and provides the stability required by the regulatory framework to promote private investment and ultimately narrow the existing gap with the OECD in broadband infrastructure; (iii) digitalization of public services through interoperability, digital signature, or the introduction of new disruptive technologies as an essential component to help public-sector productivity catch up with the more advanced countries; and (iv) development of a legal framework for policies on digital and knowledge industry training, as well as horizontal and vertical policies aimed at the digital transformation of the production sector, to help private-sector productivity catch up with the more advanced countries. Looking ahead to the future, the country will explore ways of narrowing persistent gaps in: (i) public policies for the promotion of ICT; (ii) promotion of competition for the deployment of digital connectivity infrastructure; (iii) development of digital government; and (iv) ICT adoption in the productive sector. This set of actions will improve governance of the digital economy in Argentina, bringing it closer to the OECD countries through progress on the various institutional dimensions measured in the [results matrix](#) and [monitoring and evaluation plan](#).

⁵⁶ Program designed for 100,000 programmers, 10,000 professionals in that field, and 1,000 digital entrepreneurs.

- 1.20 **The Bank's sector experience in the region.** The program is consistent with the Bank's work supporting various public institutions in the ICT sector to improve productivity. The Bank is providing support to the region through the Special Broadband Program, which encompasses more than 40 technical cooperation operations with a budget of over US\$17 million. The program's main areas of action include: (i) development of public policies that foster the adoption and use of broadband services (e.g., national broadband plans); (ii) support for regulatory strengthening; and (iii) institution-strengthening through capacity-building for public officials. Recently, the Bank supported policy reforms launched by the Government of Mexico under the Program to Boost Productivity in Mexico II (loan [3739/OC-ME](#)), as well as the implementation of some of these reforms in the telecommunications sector through technical cooperation operation [ATN/OC-14768-ME](#), Support to the Strategic and Regulatory Modernization of the Federal Telecommunications Institute (IFT). The Bank is also supporting this sector through an investment project in telecommunications infrastructure deployment in Nicaragua through the Broadband Program (loan [3612/BL-NI](#)) and in Mexico through the first operation under CCLIP for the Program to Finance Productive Infrastructure and Sustainability in Mexico (ME-O0004), Financing of the Shared Telecommunications Network (loan [4666/OC-ME](#)). In addition to the infrastructure challenges, the Bank has taken a comprehensive approach to supporting the countries in their efforts to hasten the digital transformation of their economies and societies. In addition to various knowledge products, the Bank is supporting several nonreimbursable technical cooperation initiatives on a regional level, including: (i) design and implementation of public policy instruments to support digital productive transformation⁵⁷ and digital innovation; (ii) determination of the needs for human capital with digital skills and alignment of educational and training content with the new demand; (iii) identification of regulatory reforms to support the development of digital innovation; and (iv) development of regional platforms to support the use of information to solve challenges associated with social and production-related problems, such as health, agricultural productivity and natural disaster management.^{58 59} In countries like Colombia and Brazil, the Bank is currently working with Campinas and Medellín⁶⁰ to develop and deploy digital productive transformation strategies. Lastly, through a regional public good ([ATN/OC-15264-RG](#)), the Bank is supporting the region's national metrology institutes with a view to incorporating metrological capabilities for use in new digital activities. At the country level, through investment operations, the Bank has been supporting the development of digital startups in Uruguay (loan [4329/OC-UR](#)), productive transformation strongly supported by digital technologies (loan [4272/OC-CH](#)), and innovation in businesses linked to the digital economy (loan [4358/OC-BR](#)), among others.

⁵⁷ Technical cooperation operation: Promoting digital transformation in Latin America and the Caribbean ([ATN/OC-16297-RG](#)).

⁵⁸ Technical cooperation operation: Regional integrated satellite information system to improve productivity and prevent production-related and environmental risks ([ATN/OC-15882-RG](#)).

⁵⁹ Technical cooperation operation: Skills for the digital economy ([ATN/OC-16779-RG](#)).

⁶⁰ Technical cooperation operation: Building digital innovation systems: The experience of Ruta N Medellín ([ATN/OC-16317-RG](#)).

- 1.21 **The Bank's experience in the country.** The Bank has been providing very close support to the Ministry of Finance in setting its agenda of reforms and priority investments linked to the Digital Agenda in terms of promoting digitalization in the public and private sectors. This loan largely reflects the support provided by the Bank for this reform agenda. Similarly, loan operations [2923/OC-AR](#) and [3169/OC-AR](#) supported productive transformation through digital technologies. In addition, loan operation [4025/OC-AR](#) supported innovation in the ICT sector. Technical cooperation operation [ATN/OC-15604-RG](#) supports financing for the IOT and new technologies to improve productivity; [ATN/KK-16057-RG](#) supports the updating of the National Broadband Plan and a feasibility study of infrastructure requirements to improve productive areas; [ATN/OC-16243-RG](#) supports the design of digitalization policies aimed at promoting digital sales by SMEs; [ATN/OC-15368-RG](#) supports the development of alternative finance; [ATN/OC-16721-AR](#) promotes a digital platform to support public investment prioritization efforts; [ATN/OC-13553-AR](#) supports blockchain-based open procurement processes at public enterprises; [ATN/OC-16914-RG](#) supports the adoption of BIM programs; and MIF technical cooperation operation [ATN/ME-16152-AR](#) supports the development of soft skills to support this transformation.
- 1.22 **Lessons learned.** A noteworthy lesson learned from these experiences is the need to approach digital issues holistically, dealing with separate areas of activity together, such as infrastructure regulation and the digital agenda (covering public policies and area of jurisdiction). The lessons learned from these projects and technical cooperation operations have been incorporated into the program design, to ensure that the reforms are approved, can be implemented effectively, are accepted by the stakeholders in the country, and have a logical sequence of milestones to be followed over time. The program incorporates the Bank's lessons learned in the design of policy-based loans: (i) a proper sequencing of reforms should take into account the capabilities of the institutions involved and define a horizontal logic of progressive advances in reforms that combine policy steps with technical capacity-building; (ii) the planned reforms should reflect the interests and capabilities of the entities that will implement them, to improve their effectiveness; (iii) tying incentives to meeting preestablished goals should have a positive impact on the success of the reforms; and (iv) there should be effective coordination between the various entities involved in designing the reforms.⁶¹
- 1.23 **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is aligned with the development challenges of: (i) productivity and innovation, by proposing reforms in citizen services and connectivity that have an impact on the productive sector; and (ii) social inclusion and equality, by proposing measures to enable the digital transformation of SMEs, narrow the digital divides in the country, and strengthen the volume, quality, timeliness, and accessibility of the services provided to the population. The program is also aligned with the crosscutting issue of institutional capacity and rule of law, by proposing measures to strengthen the institutional and regulatory framework, in order to advance with the digital agenda and remove obstacles to productivity and business growth. The program is aligned with the

⁶¹ See, for example, loan [3177/BL-NI](#), loan [3326/OC-DR](#), and the Country Program Evaluation: Panama 2010-2014, issued by the Office of Evaluation and Oversight (OVE).

Corporate Results Framework 2016-2019 (document GN-2727-6) via the indicator of government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery, since it will strengthen government institutions in terms of services offered to the public. In addition, the program is aligned with the Sector Strategy: Institutions for Growth and Social Welfare (document GN-2587-2) in the area of improving innovation and productivity for growth and social welfare. It is consistent with the Support to SMEs and Financial Access/Supervision Sector Framework Document (document GN-2768-7), particularly dimension of success 3 on promoting new digital technologies conducive to productivity improvements. Similarly, the program is consistent with the Innovation, Science, and Technology Sector Framework Document (document GN-2791-8), which envisages Bank support in driving digital transformation and harnessing the potential of the digital economy. Lastly, the program is aligned with the Bank's country strategy with Argentina 2016-2019 (document GN-2870-1) via the strategic objectives of: (i) institutional strengthening of the government, by fostering reforms that improve the efficiency of public management and the regulatory framework for doing business; and (ii) developing business services and public goods to foster integration and innovation, by driving reforms to improve the quality of local suppliers through their digitalization.

- 1.24 **Consistency with the Public Utilities Policy.** The program is consistent with the objectives of the Public Utilities Policy (document GN-2716-6). The program satisfies the principles of this policy because, among other things, it promotes: (i) access to ICT services; (ii) efficient delivery of ICT services; (iii) effective incentives for service demand; (iv) improvement of sector governance; (v) economic regulation to create incentives for efficiency, investment, and protection of users' rights; (vi) private participation in ICT service delivery; (vii) strengthening of ICT infrastructure; and (viii) ICT service innovation, efficiency, and access. In addition, to satisfy the conditions specifically established in the Public Utilities Policy (section IV), a cost-benefit, a cost-efficiency, and a financial sustainability analysis of the proposed program's reforms were conducted for this policy-based loan operation, as described in the Analysis of compliance with the Public Utilities Policy (for details, see [optional electronic link 4](#)).

B. Objectives and components

- 1.25 **Objective.** The general objective of the program is to improve the productivity of the Argentine economy by advancing its digitalization through actions to: (i) establish a digital agenda; (ii) strengthen the legal framework for connectivity; (iii) broaden offerings and improve the quality of digital government services; and (iv) promote policy measures for digital productive transformation.
- 1.26 **Beneficiaries.** The program's reforms are crosscutting in nature and aimed at overcoming the regulatory and institutional limitations to achieve a substantial improvement in the productivity of the Argentine economy through digitalization. In view of this objective and the broad nature of the reforms, this program is expected to benefit the economy's operators as a whole. In particular, the businesses

operating in the country (especially SMEs)⁶² are expected to benefit from the coordination of actions under a digital agenda that promotes the adoption of productivity-enhancing digital technologies as a result of the reform package envisaged by the program. In addition, businesses and the general public are expected to benefit from the improvement in the delivery of digital government services.

- 1.27 **Components.** The program has five components. The measures under these components are aimed at strengthening the strategy for digitalization of the public and private sectors in Argentina, since the program supports a holistic, multisector approach aligned with the Argentine Digital Agenda. For more details on the policy actions under each component and respective programmatic operations, see Annex II, Policy Matrix.
- 1.28 **Component I: Macroeconomic stability.** The objective of this component is to ensure that a macroeconomic context is maintained that is consistent with the program objectives as established in the Policy Matrix and [Policy Letter](#). The policy action under programmatic operations I and II is to ensure that the macroeconomic context of the borrower is consistent with the program objectives.
- 1.29 **Component II: Development of the Digital Agenda.** The objective of this component is to establish the Argentine Digital Agenda as an instrument for public policy coordination. This component has a single subcomponent: Development of the digital agenda. The policy action under programmatic operation I is the approval of the proposed objectives and governance structure of the Argentine Digital Agenda, following international best practices. The indicative policy actions of programmatic operation II are: (i) entry into operation of the governance mechanism for the Argentine Digital Agenda;⁶³ and (ii) development of an implementation plan that includes targets and monitoring indicators for each of the actions envisaged in the Argentine Digital Agenda.
- 1.30 **Component III: Strategic regulation for digital connectivity.** This component has the following subcomponents:
- a. **Strengthening of the legal framework for ICTs.** The policy action for this subcomponent under programmatic operation I is the introduction of a bill in the Congress of the Argentine Nation that, by amending existing legislation,⁶⁴ establishes a legal framework for ICTs that: (i) fosters investment and competition in the deployment of infrastructure through infrastructure sharing; (ii) promotes the use of the radiofrequency spectrum; and (iii) fosters convergence of ICT services irrespective of technology and platform. To provide continuity for these measures, the indicative policy actions of programmatic operation II are: (i) establishment of implementing regulations for the Law to Support ICT Infrastructure Deployment and Competition, which

⁶² As of September 2018, the estimated total number of SMEs in Argentina is 853,886 (Source: Ministry of Production). Of these businesses, an estimated 605,854 are active (Source: Ministry of Production, GPS Empresas).

⁶³ The Argentine Digital Agenda's governance mechanism will seek to effectively coordinate the various public institutions responsible for implementing the planned initiatives, to maximize synergies and accomplish the goals as planned and on schedule.

⁶⁴ Refers to the laws mentioned in paragraph 1.10.

provides the legal framework for ICTs; (ii) introduction in Congress of a bill on communications convergence, establishing: (a) the principle of technological convergence and neutrality; and (b) the institutional and organizational structure for regulation and supervision of the ICT market; and (iii) development of a regulatory framework for use of the radiofrequency spectrum, including but not limited to its planning and allocation process.

- b. **Improved regulation of competition in the ICT market.** The policy actions of programmatic operation I for this subcomponent are: (i) approval of a legal framework for the defense of competition and creation of an independent national competition authority and the rules governing it; (ii) approval of the number portability rules for the fixed telephony service; and (iii) approval of the General Regulations on Interconnection and Access. The indicative policy actions of programmatic operation II are: (i) regulation of the mechanisms for coordination between the National Competition Authority (ANC) and ENACOM; (ii) approval of the plan for development of ICT service cost models to regulate competition; (iii) development of a methodology to identify operators with significant market power;⁶⁵ (iv) evaluation of the implementation of number portability of the fixed telephony service; and (v) development of rules to facilitate national data roaming.
- c. **Development of the infrastructure for digital inclusion.** The policy actions of programmatic operation I for this subcomponent are: (i) approval of Resolution allowing: (a) expansion of the wholesale Internet network; and (b) Internet connection in relatively unpopulated areas; and (ii) identification of actions and best practices for gender mainstreaming in digital inclusion, including G20 best practices. The indicative policy actions of programmatic operation II are: (i) development of a plan to consolidate the connectivity initiatives for broadband expansion; and (ii) preparation of a strategy for bridging the gender digital divide.

1.31 **Component IV: Development of digital government.** This component has the following subcomponents:

- a. **Strengthening of critical infrastructure and personal data security and good practices in the use of ICTs.** The policy actions of programmatic operation I for this subcomponent are: (i) approval of a draft national cybersecurity strategy; and (ii) approval of regulations on privacy in personal data use in the public sector and on good practices in the use of ICTs in the public sector. The indicative policy actions of programmatic operation II are: (i) approval of the National Cybersecurity Strategy; (ii) development of a critical infrastructure protection plan that establishes types of infrastructure, responsibilities, mechanisms for action, and plans for raising awareness; and (iii) introduction of a bill in Congress to amend the Data Protection Law.
- b. **Development of digitalization and interoperability in the public sector.** The policy actions of programmatic operation I for this subcomponent are: (i) approval of regulations making it mandatory for the national public

⁶⁵ These three measures contribute to bring about measure (i) under the first programmatic loan, since, among other things, they develop regulations and institutional coordination mechanisms for the institution created under the first programmatic loan.

administration to conduct all transactions with citizens digitally; and (ii) implementation of the EDM data interoperability module (INTEROPER.AR) as a secure platform for exchange of public information. The indicative policy actions of programmatic operation II are: (i) evaluation of the scope and use of the national public administration's online transactions with citizens; and (ii) quantitative evaluation of the use of INTEROPER.AR.⁶⁶

- c. **Deployment of tools and platforms to enable secure Internet transactions between citizens and government.** The policy actions of programmatic operation I for this subcomponent are: (i) creation of a remote digital signature platform (FIRM.AR) to facilitate mass use of the digital signature; and (ii) authorization of the use of the citizen electronic authentication platform in the general public's transactions with the national public administration (AUTENTIC.AR) to authenticate platforms of entities that are not part of the national public sector. The indicative policy actions of programmatic operation II are: (i) approval of remote digital signature records throughout the country by at least 30 authorities; and (ii) authorization for at least 20 entities that use AUTENTIC.AR to authenticate users on their own platforms.
- d. **Promotion of the use of new technologies to deliver public services.** The policy actions of programmatic operation I for this subcomponent are: (i) creation of the Argentine Federal Blockchain network, joining the private sector, academia, and the public sector; (ii) launch of a biometric identification service using facial recognition of individuals based on information from the National Registry of Persons; and (iii) development of an occupational map of the family of ICT positions for the design of training programs for public servants. The indicative policy actions of programmatic operation II are: (i) publication of guidelines for the use of blockchain and smart contract technologies; (ii) integration of the biometric identification service with the digital single window for public services for the general public (MIARGENTINA); and (iii) implementation of an ICT training curriculum by the National Public Administration Institute (INAP).

1.32 **Component V: Digital productive transformation.** This component has the following subcomponents:

- a. **Digital transformation of businesses.** The policy actions of programmatic operation I for this subcomponent are: (i) start of implementation of a pilot program for digital transformation of SMEs to obtain inputs for developing an SME digital transformation program; and (ii) approval of a regulatory framework allowing the National Industrial Property Institute (INPI) to digitize the processes for filing applications and other transactions for individuals and businesses to obtain trademark and patent protection. The indicative policy actions of programmatic operation II are: (i) development of an SME digital transformation program; and (ii) completion of INPI digitalization⁶⁷ to improve and streamline service to businesses, research centers, and other users.

⁶⁶ User access to INTEROPER.AR creates digital records that make it possible to quantify the level and type of use and make decisions based on this information.

⁶⁷ State agency responsible for enforcing industrial property protection laws.

- b. **Digital technology-based innovation.** The policy actions of programmatic operation I are: (i) development of a work plan for preparation of a draft science and technology law that would include a new regulatory framework to facilitate the development of new technologies using testbeds and sandboxes; (ii) creation of an emerging technologies working group with public and private sector representatives; and (iii) establishment of guidelines for the development of a national artificial intelligence plan. The indicative policy actions of programmatic operation II are: (i) introduction of the legislative bill for the National Science, Technology, and Innovation System, including a regulatory framework to facilitate the development of new technologies through testbeds that will consolidate the outcomes of measure (i) under programmatic operation I; (ii) identification of agreed lines of action in the working group for public-private collaboration on the use of emerging technologies; and (iii) presentation of the National Artificial Intelligence Plan.
- c. **Digital transformation in vertical sectors.**⁶⁸ The policy actions for this subcomponent are the following:
- (i) **Knowledge-based services.** The policy action of programmatic operation I is the establishment of technical guidelines for the drafting of a legislative bill on the knowledge economy. The indicative policy action of programmatic operation II is the introduction of a knowledge economy bill in Congress.
 - (ii) **Construction sector.** The policy actions of programmatic operation I are: (i) preparation of a draft resolution setting out the building information modeling (BIM) strategy in Argentina and establishing a working group for its implementation in the public sector; and (ii) launch of pilot projects using BIM in at least four public agencies. The indicative policy actions of programmatic operation II are: (i) approval of a regulatory framework for the use of BIM in the national public sector; (ii) development of protocols and a plan for adopting BIM in public works; and (iii) training in the use of BIM technology in the public sector.
 - (iii) **Financial sector.** The policy action of programmatic operation I is the approval of regulations: (i) to facilitate electronic means of payment by improving interoperability between current accounts and payment services (Clave Virtual Uniforme [Uniform Virtual Code] (CVU)); and (ii) for the adoption of a standard for payments through a quick response (QR) code. Programmatic operation II envisages the development of guidelines for implementing a regulatory sandbox for alternative financing.
- d. **Talent promotion for digital transformation.** The policy actions of programmatic operation I are: (i) preparation of a proposal to reform Program 111,000, which is designed to train programmers, professionals, and entrepreneurs so that they are a better match with businesses; and (ii) introduction in Congress of a legislative bill that includes creating a national

⁶⁸ The knowledge economy sectors, being close to the technology frontier, are leaders in job growth and exports (after the oilseed and grain sectors). The construction and financial sectors lag the most with respect to the productivity and technological innovation frontier.

labor training institute, an occupational identity card, and a federal network of employment services. The indicative policy actions of programmatic operation II are: (i) launch of the reformulated Program 111,000; (ii) implementation of a basic labor training program that includes training in digital skills; and (iii) launch of the National Labor Training Institute, with active programs to support and train digital talent.

C. Key results indicators

- 1.33 The key indicator for measuring the impact of the program will be the average annual real GDP growth between 2018 and 2026, which is expected to achieve a target average of 3.2%. The specific objectives of the program will be measured through the following outcome indicators: (i) index of online government services; (ii) index of importance of ICTs for the government's vision for the future; (iii) index of laws related to ICTs; and (iv) index of Internet and ICT use by businesses (for more details, see: [results matrix](#) and [monitoring and evaluation plan](#)).

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 This operation is structured as a programmatic policy-based loan (PBP), based on document CS-3633-2, "Policy-based Loans: Guidelines for Preparation and Implementation," to facilitate a policy dialogue between the country and the Bank and provide the necessary time for the reforms to be implemented. The selection of the PBP modality, across two loan operations, reflects the interest of the Government of Argentina in Bank support for sector policy reforms and institutional changes in the medium-term through an ongoing policy dialogue and making adjustments to the implementation strategy over the course of a dynamic reform process so that the policy actions initiated under this operation can be expanded under the second programmatic operation. Since the Bank's support is provided across two programmatic operations, this instrument makes it possible to adapt to the changing circumstances of the country.
- 2.2 **Dimensioning.** The amount of this first loan for the first programmatic operation will be US\$300 million, drawn from the Bank's Ordinary Capital resources. This amount will represent around 0.8% of the country's financing requirements (US\$39.5 billion). The operation is justified under paragraph 3.27(a) of document CS-3336-2.

B. Environmental and social safeguard risks

- 2.3 Under Directive B.13 of the Bank's Environment and Safeguards Compliance Policy (document GN-2208-20 and Operational Policy OP-703), this operation does not require classification. The proposed reforms have no adverse environmental or social impacts, and the program will not finance specific infrastructure or investment projects.⁶⁹

⁶⁹ Subcomponent III(c) does not call for the financing of civil works but promotes public policy reforms for the development of digital infrastructure.

C. Other key project risks and issues

- 2.4 **Development.** There is a medium-level development risk, since the issues addressed by the program are innovative in nature and the counterpart's experience may be limited, leading to delays in the implementation of the measures. The mitigation measure for this risk is the technical and financial support provided by the Bank through the technical cooperation operations described in paragraph 1.21.
- 2.5 **Public management and governance.** In addition, there is a medium-level public management and governance risk that, since the program envisages long-term actions, a shift in government priorities could affect the completion of the two operations proposed under the program. Specifically, the policy conditions of the reforms included in the programmatic series (i.e., programmatic operations I and II) are expected to be fulfilled under the current administration. As a mitigation measure, the proposed reforms are aligned with the major focus areas of the medium-term strategy for Argentine Digital Agenda. There is also another medium-level public management and governance risk, posed by the multisector nature of the interventions, which necessitates political consensus and close coordination among institutions to avoid delays in implementation of the reforms. As a mitigation measure, the executing agency will use the institutional means at its disposal to ensure effective coordination among the public agencies associated with the policy measures included in this operation. In addition, the executing agency will collaborate with the Bank in coordinating as needed with other institutions associated with the policy measures to be pursued under this operation.
- 2.6 **Fiscal sustainability.** There are medium-level macroeconomic risks associated with the high public and external financing needs, the existence of liquidity surpluses due to the large stock of Central Bank short-term debt, and the high current account deficit. These factors make the country vulnerable to a potential hardening of global financial and trade terms. The program objectives could be jeopardized if macroeconomic and fiscal shocks lead to a deterioration of the public accounts or cause the beneficiaries of the reforms (e.g., businesses) to not respond as expected. Specifically, the adoption of technologies could fail to generate the expected productivity and growth benefits if the technologies are not assimilated by a sufficiently large number of businesses. As a mitigation measure, to ensure fiscal sustainability, the program's proposed reforms have been designed so as to provide benefits and not become a public finance burden.
- 2.7 **Program sustainability.** The development of the Argentine Digital Agenda will establish strategic objectives for moving forward on the country's digital transformation. Since the agenda will envisage specific action plans and initiatives with scheduled milestones for meeting the objectives set, carrying out these initiatives will be essential for the sustainability of the program in subsequent years. The Argentine Digital Agenda is based on international good practices and OECD recommendations on digitalization. Institutional governance and coordination arrangements are being reinforced with a view to ensuring effective implementation of this agenda, and these arrangements will help to make such implementation sustainable beyond the life of the program.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Borrower and executing agency.** The borrower will be the Argentine Republic, and the executing agency will be the borrower, acting through its Ministry of Finance. The executing agency will be supported by its Office of Special Programs and Projects with a Sector-wide Approach (DPPEESA), or the unit superseding it, to perform its functions. The executing agency will have the following responsibilities: (i) coordinate with the agencies responsible for the actions indicated for this operation on all issues related to these actions (including the Office of the Cabinet Chief's Office of the Undersecretary for Modernization, National Communications Agency (ENACOM), National Office for Information Technologies (ONTI), National Public Administration Institute (INAP), Ministry of the Interior, Public Works, and Housing, Ministry of Production and Labor, National Securities Commission, Ministry of Education, Culture, and Science and Technology, and the National Competition Authority (ANC)); (ii) provide evidence that the policy commitments have been fulfilled as well as any other program-related evidence required by the Bank to approve the relevant disbursement; and (iii) once the program disbursement has been secured, gather the data from the performance indicators that will be used to evaluate the program outcomes. The executing agency will use the institutional means at its disposal to ensure effective coordination among the public agencies associated with the policy measures included in this operation. In addition, the executing agency will collaborate with the Bank in coordinating as needed with other institutions associated with the policy measures to be pursued under this operation.
- 3.2 **Special contractual conditions precedent to the sole disbursement of the loan:** Disbursement of the loan proceeds is contingent on the borrower's fulfillment, to the Bank's satisfaction, of the policy reform commitments as established in the Policy Matrix (Annex II), the [Policy Letter](#), and the conditions established in the loan contract.

B. Summary of arrangements for monitoring results

- 3.3 **Monitoring.** The program implementation will be monitored by the Ministry of Finance. The borrower and the Bank will hold semiannual meetings to review fulfillment of the conditions required by the Bank. Monitoring instruments will include the Policy Matrix (Annex II), the [means of verification matrix](#), the [monitoring and evaluation plan](#), and the [results matrix](#).
- 3.4 **Evaluation.** At the end of the program, the Bank will prepare a project completion report and an ex post evaluation based on a before-after analysis of the results indicators and supplemented by an analysis of the empirical evidence in the sector. For more details, see the [monitoring and evaluation plan](#).

IV. POLICY LETTER

- 4.1 The Policy Matrix for the program (Annex II) is aligned with the [Policy Letter](#) issued by the Argentine Republic reaffirming the government's commitment to implement the activities agreed-upon with the Bank.

Development Effectiveness Matrix		
Summary		AR-L1304
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Productivity and Innovation -Institutional Capacity and the Rule of Law	
Country Development Results Indicators	-Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery (#)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2870-1	(i) Institutional Strengthening of Government; and (ii) Development of Business Services and Public Goods to Foster Integration and Innovation.
Country Program Results Matrix		The intervention is not included in the 2018 Operational 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	7.7	
3.1 Program Diagnosis	3.0	
3.2 Proposed Interventions or Solutions	1.7	
3.3 Results Matrix Quality	3.0	
4. Ex ante Economic Analysis	N/A	
5. Monitoring and Evaluation	7.0	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	4.5	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Low	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks	Yes	
Mitigation measures have indicators for tracking their implementation	Yes	
Environmental & social risk classification	B.13	
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)		
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	TC: ATN/OC-15604-RG; ATN/KK-16057-RG; ATN/OC-16243-RG; ATN/OC-15368-RG; ATN/OC-16721-AR; ATN/OC-13553-AR; ATN/OC-16914-RG; and ATN/ME-16152-AR (MIF (BID Lab)). See POD (¶1.21)

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

The program for the strengthening of the digital agenda: connectivity, electronic government and digital productive transformation (AR-L1304) aims to improve the productivity of the Argentine economy. The design of the program involves four components designed to: (i) establish and develop a Digital Agenda; (ii) strengthen the legal connectivity framework; (iii) expand the offer and boost the quality of digital government services; and (iv) promote regulatory measures for the digital productive transformation.

In the diagnosis, the program identifies low productivity as the main problem, which is associated with low digital connectivity in both the public and private sectors. The document is very clear in delineating the gaps in productivity, as well as in access and use of digital tools in the Argentine Republic.

The vertical logic supports each of the interventions based on activities of other projects financed by the IDB in similar contexts, which, however, does not constitute clear evidence of the effectiveness of such interventions. This is understandable given the novelty of this type of project.

The project proposes to evaluate the effectiveness of components 2 to 5 using a before and after methodology. As this type of analysis does not allow for empirical attribution of effectiveness, it will be complemented by a theoretical attribution analysis.

POLICY MATRIX

Components/Policy objectives	Policy conditions for programmatic operation I	Fulfillment status ¹ of conditions for programmatic operation I	Triggers for programmatic operation II
Component I: Macroeconomic stability			
Ensure that a macroeconomic context is maintained that is consistent with the program objectives as established in the Policy Matrix and Policy Letter.	(1.1.1) Ensure that the macroeconomic context of the borrower is consistent with the program objectives.	Fulfilled.	(1.2.1) Ensure that the macroeconomic context of the borrower is consistent with the program objectives.
Component II: Development of the digital agenda			
Establishment of the digital agenda as an instrument for public policy coordination.	(2.1.1) Approval of proposed objectives and governance structure for the Argentine Digital Agenda, following international best practices.	Fulfilled (Q4 2018).	(2.2.1) Entry into operation of the governance mechanism for the Argentine Digital Agenda. (2.2.2) Development of an implementation plan that includes targets and monitoring indicators for each of the actions envisaged in the Argentine Digital Agenda.
Component III: Strategic regulation for digital connectivity			
Strengthening of the legal framework for information and telecommunication technologies (ICTs).	(3.1.1) Introduction of a bill in the Congress of the Argentine Nation that, by amending existing legislation, establishes a legal framework for ICTs that: (i) fosters investment and competition in the deployment of infrastructure through infrastructure sharing; (ii) promotes the use of the radiofrequency spectrum; and (iii) fosters convergence of ICT	Fulfilled (Q2 2018).	(3.2.1.a) Establishment of implementing regulations for the Law to Support ICT Infrastructure Deployment and Competition, which provides the legal framework for ICTs. (3.2.1.b) Introduction in Congress of a bill on communications convergence, establishing: (i) the principle of technological convergence and

¹ This information is merely indicative as of the date of this document. In accordance with the provisions of document CS-3633-2 (Policy-based Loans: Guidelines for Preparation and Implementation), fulfillment of all specified conditions for disbursement, including maintaining an appropriate macroeconomic policy framework, will be verified by the Bank at the time of the relevant disbursement request from the borrower and be duly reflected in the disbursement eligibility memorandum.

Components/Policy objectives	Policy conditions for programmatic operation I	Fulfillment status ¹ of conditions for programmatic operation I	Triggers for programmatic operation II
	services irrespective of technology and platform.		neutrality; and (ii) the institutional and organizational structure for regulation and supervision of the ICT market. (3.2.1.c) Development of a regulatory framework for use of the radiofrequency spectrum, including but not limited to its planning and allocation process.
Improved regulation of competition in the ICT market.	(3.1.2.a) Approval of a legal framework for the defense of competition and creation of an independent national competition authority and the rules governing it.	Fulfilled (Q2 2018).	(3.2.2.a) Regulation of the mechanisms for coordination between the National Competition Authority (ANC) and Ente Nacional de Comunicaciones (ENACOM), the national communications regulatory agency. (3.2.2.a) Approval of the plan for development of ICT service cost models to regulate competition. (3.2.2.a) Development of a methodology to identify operators with significant market power.
	(3.1.2.b) Approval of the number portability rules for the fixed telephony service.	Fulfilled (Q2 2018).	(3.2.2.b) Evaluation of the implementation of number portability of the fixed telephony service.
	(3.1.2.c) Approval of the General Regulations on Interconnection and Access.	Fulfilled (Q2 2018).	(3.2.2.c) Development of rules to facilitate national data roaming.

Components/Policy objectives	Policy conditions for programmatic operation I	Fulfillment status ¹ of conditions for programmatic operation I	Triggers for programmatic operation II
Development of infrastructure for digital inclusion.	(3.1.3.a) Approval of resolutions allowing: (i) expansion of the wholesale Internet network; and (ii) Internet connection in relatively unpopulated areas.	Fulfilled (Q4 2017, Q3 2018).	(3.2.3.a) Development of a plan to consolidate the connectivity initiatives for broadband expansion.
	(3.1.3.b) Identification of actions and best practices for gender mainstreaming in digital inclusion, including G20 best practices.	Fulfilled (Q4 2018).	(3.2.3.b) Preparation of a strategy for bridging the gender digital divide.
Component IV: Development of digital government			
Strengthening of critical infrastructure and personal data security and good practices in the use of ICTs.	(4.1.1.a) Approval of a draft national cybersecurity strategy.	Fulfilled (Q4 2018).	(4.2.1.a) Approval of the National Cybersecurity Strategy. (4.2.1.a) Development of a critical infrastructure protection plan that establishes types of infrastructure, responsibilities, mechanisms for action, and plans for raising awareness.
	(4.1.1.b) Approval of regulations on privacy in personal data use in the public sector and on good practices in the use of ICTs in the public sector.	Fulfilled (Q3 2018).	(4.2.1.b) Introduction of a bill in Congress to amend the Data Protection Law.
Development of digitalization and interoperability in the public sector.	(4.1.2.a) Approval of regulations making it mandatory for the national public administration to conduct all transactions with citizens digitally.	Fulfilled (Q4 2017, Q3 2018).	(4.2.2.a) Evaluation of the scope and use of the national public administration's online transactions with citizens.
	(4.1.2.b) Implementation of the EDM data interoperability module (INTEROPER.AR) as a platform for secure exchange of public information.	Fulfilled (Q1 2018, Q2 2018).	(4.2.2.b) Qualitative evaluation of the use of INTEROPER.AR.

Components/Policy objectives	Policy conditions for programmatic operation I	Fulfillment status ¹ of conditions for programmatic operation I	Triggers for programmatic operation II
Deployment of tools and platforms to enable secure Internet transactions between citizens and government.	(4.1.3.a) Creation of a remote digital signature platform (FIRM.AR) to facilitate mass use of the digital signature.	Fulfilled (Q4 2017, Q1 2018, Q3 2018).	(4.2.3.a) Approval of remote digital signature records throughout the country by at least 30 authorities.
	(4.1.3.b) Authorization of the use of the citizen electronic authentication platform in the general public's transactions with the national public administration (AUTENTIC.AR) to authenticate platforms of entities that are not part of the national public sector.	Fulfilled (Q2 2018).	(4.2.3.b) Authorization for at least 20 entities that use AUTENTIC.AR to authenticate users on their own platforms.
Promotion of the use of new technologies to deliver public services.	(4.1.4.a) Creation of the Argentine Federal Blockchain network, joining the private sector, academia, and the public sector.	Fulfilled (Q2 2018).	(4.2.4.a) Publication of guidelines for the use of blockchain and smart contract technologies.
	(4.1.4.b) Launch of a biometric identification service using facial recognition of individuals based on information from the National Registry of Persons.	Fulfilled (Q3 2018).	(4.2.4.b) Integration of the biometric identification service with the digital single window for public services for the general public (MIARGENTINA).
	(4.1.4.c) Development of an occupational map of the family of ICT positions for the design of training programs for public servants.	Fulfilled (Q4 2018).	(4.2.4.c) implementation of an ICT training curriculum by the INAP.
Component V: Digital productive transformation			
Digital transformation of businesses.	(5.1.1.a) Start of implementation of a pilot program for digital transformation of SMEs to obtain inputs for developing an SME digital transformation program.	Fulfilled (Q4 2018).	(5.2.1.a) Development of an SME digital transformation program.
	(5.1.1.b) Approval of a regulatory framework allowing the INPI to digitize the processes for filing	Fulfilled (Q3 2018).	(5.2.1.b) Completion of INPI digitalization to improve and streamline service to

Components/Policy objectives	Policy conditions for programmatic operation I	Fulfillment status ¹ of conditions for programmatic operation I	Triggers for programmatic operation II
	applications and other transactions for individuals and businesses to obtain trademark and patent protection.		businesses, research centers, and other users.
Digital technology-based innovation.	(5.1.2.a.1) Development of a work plan for preparation of a draft science and technology law that would include a new regulatory framework to facilitate the development of new technologies using testbeds and sandboxes.	Fulfilled (Q3 2018).	(5.2.2.a.1) Introduction of the legislative bill for the National Science, Technology, and Innovation System, including a regulatory framework to facilitate the development of new technologies through testbeds.
	(5.1.2.a.2) Creation of an emerging technologies working group with public and private sector representatives.	Fulfilled (Q3 2018).	(5.2.2.a.2) Identification of agreed lines of action in the working group for public-private collaboration on the use of emerging technologies.
	(5.1.2.b) Establishment of guidelines for the development of a national artificial intelligence plan.	Fulfilled (Q4 2018).	(5.2.2.b) Presentation of the National Artificial Intelligence Plan.
Digital transformation in vertical sectors.	(5.1.3.a) Establishment of technical guidelines for the drafting of a legislative bill on the knowledge economy.	Fulfilled (Q4 2018).	(5.2.3.a) Introduction of a knowledge economy bill in Congress.
	(5.1.3.b). Preparation of a draft resolution setting out the building information modeling (BIM) strategy in Argentina and establishing a working group for its implementation in the public sector.	Fulfilled (Q4 2018).	(5.2.3.b) Approval of a regulatory framework for the use of BIM in the national public administration. (5.2.3.b) Development of protocols and a plan for the adoption of BIM in public works.
	(5.1.3.c) Launch of pilot projects the use BIM in at least four public agencies.	Fulfilled (Q4 2018).	(5.2.3.c) Training in the use of BIM technology in the public sector.

Components/Policy objectives	Policy conditions for programmatic operation I	Fulfillment status ¹ of conditions for programmatic operation I	Triggers for programmatic operation II
	(5.1.4) Approval of regulations: (i) to facilitate electronic means of payment by improving interoperability between current accounts and payment services (Clave Virtual Uniforme [Uniform Virtual Code] (CVU)); and (ii) for the adoption of a standard for payments through a quick response (QR) code.	Fulfilled (Q1 2018, Q2 2018).	(5.2.4) Development of guidelines for implementing a regulatory sandbox for alternative financing.
Talent promotion for digital transformation.	(5.1.5) Preparation of a proposal to reform Program 111,000, which is designed to train programmers, professionals, and entrepreneurs so that they are a better match with businesses.	Fulfilled (Q4 2018).	(5.2.5) Launch of the reformulated Program 111,000.
	(5.1.6) Introduction in Congress of a legislative bill that includes creating a national labor training institute, an occupational identity card, and a federal network of employment services.	Fulfilled (Q2 2018).	(5.2.6.a) Implementation of a basic labor training program that includes training in digital skills. (5.2.6.b) Launch of the National Labor Training Institute, with active programs to support and train digital talent.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/19

Argentina. Loan ____/OC-AR to the Argentine Republic. Program for Strengthening the Digital Agenda: Connectivity, Electronic Government, and Digital Productive Transformation

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 Argentine Republic, as borrower, for the purpose of granting it a financing to cooperate in the execution of the Program for Strengthening the Digital Agenda: Connectivity, Electronic Government, and Digital Productive Transformation. Such financing will be for an amount of up to US\$300,000,000 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 ____ 2019)