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URUGUAY

URUGUAY GLOBAL II: PROMOTING ADVANCED DIGITAL SKILLS FOR INTERNATIONALIZATION

(UR-L1197)

LOAN PROPOSAL

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Annex I	Development Effectiveness Matrix (DEM) - Summary
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LINKS

REQUIRED:

- 1. Monitoring and evaluation plan
- 2. Theory of change and estimated cost
- 3. Environmental and social review summary

OPTIONAL:

- 1. Bibliography
- 2. Operating Regulations
- 3. Economic analysis of the project
- 4. <u>UTEC Strategic Plan 2020-2025</u>
- 5. Assessment of the executing agency's procurement system
- 6. <u>Indicative analysis of output costs and allocation of amounts to disbursement-linked indicators</u>
- 7. Description of knowledge-intensive goods and services
- 8. <u>UTEC study of supply of and demand for advanced digital skills (preliminary)</u>
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- 10. Mapping of instruments to promote entrepreneurship in Uruguay
- 11. Gender and diversity annex
- 12. Climate change annex
- 13. Bibliographic and descriptive quantitative evidence

ABBREVIATIONS

Al Artificial intelligence

ANDE Agencia Nacional de Desarrollo Económico (National Economic Development

Agency)

ANII Agencia Nacional de Investigación e Innovación (National Research and

Innovation Agency)

BPS Social Security Bank

CEIBAL Conectividad Educativa de Informática Básica para el Aprendizaje en Línea

(Basic Educational Computing and Connectivity for Online Learning)

CUTI Cámara Uruguaya de Tecnologías de la Información (Uruguayan Chamber of

Information Technologies)

ECLAC Economic Commission for Latin America and the Caribbean

GDP Gross domestic product

ICT Information and communications technology

IMF International Monetary Fund

INEFOP Instituto Nacional de Empleo y Formación Profesional (National Institute for

Employment and Professional Training)

IRR Internal rate of return LBR Loan based on results

MEF Ministry of Economy and Finance

MSME Micro, small, and medium-sized enterprises

MTSS Ministry of Labor and Social Security

OECD Organisation for Economic Co-operation and Development

R&D Research and development

R&D&I Research and development and innovation

SOFR Secured Overnight Financing Rate

STEM Science, technology, engineering, and mathematics

UTEC Universidad Tecnológica de Uruguay (Technological University of Uruguay)

WEF World Economic Forum WTO World Trade Organization

EXECUTIVE SUMMARY

URUGUAY URUGUAY GLOBAL II: PROMOTING ADVANCED DIGITAL SKILLS FOR INTERNATIONALIZATION (UR-L1197)

	Financial Terms and Conditions												
Borrower:			Flexible Financing F	acility ^(a)									
Eastern Republic of Uruguay			Amortization period:	24.5 years									
Executing agency:			Disbursement period:	5 years									
Universidad Tecnológica de l		ical	Grace period:	6 years ^(b)									
University of Uruguay) (UTEC	C)		Interest rate:	SOFR-based									
Source	Amount (US\$)	%	Credit fee:	(c)									
IDB (Ordinary Capital):	8,000,000	100	Inspection and supervision fee:	(c)									
Total:	8,000,000	100	Weighted average life:	15.25 years									
			Approval currency:	United States dollar									

Project at a Glance

Project objective/description: The general objective is to promote Uruguay's integration into global markets by developing skills for new technologies in knowledge-intensive goods and services sectors. The specific objectives are: (i) to increase the supply of human capital with the advanced digital skills needed in knowledge-intensive goods and services sectors; and (ii) to build capacity for international positioning at companies in knowledge-intensive goods and services sectors and at companies that use knowledge-intensive goods and services in their processes and products.

Special contractual conditions precedent to the first disbursement of the loan proceeds: The borrower, through the executing agency, will submit evidence to the Bank of: (i) the entry into force of the Program Operating Regulations, in accordance with the terms agreed upon with the Bank; (ii) hiring of the consulting agency responsible for external verification of results in accordance with the terms agreed upon with the Bank; and (iii) establishment of the program execution unit within the structure of the Technological University of Uruguay (UTEC), hiring of the program director, and appointment of the financial management and procurement specialists (paragraph 3.5).

Special contractual conditions of execution: Prior to the start of Component 2 activities, the borrower, through the executing agency, will submit evidence to the Bank of the entry into force of a cooperation agreement between UTEC and Uruguay XXI that establishes the responsibilities and interagency coordination mechanisms for those activities (paragraph 3.6).

Exceptions to Bank policies: None.

	Strategic Alignment													
Objectives:(d)		01 □			02 □		O3 🗵							
Operational focus areas:(e)	OF1 ⊠	OF2-G ⊠	OF2-G ⊠ O		OF4 ⊠	OF5	X	OF6 □	OF7 ⊠					
		OF2-D ⊠												

- (a) Under the terms of the Flexible Financing Facility (FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection 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 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 the applicable policies.
- (d) O1 (Reduce poverty and inequality); O2 (Address climate change); and O3 (Bolster sustainable regional growth).
- (e) OF1 (Biodiversity, natural capital, and climate action); OF2-G (Gender equality); OF2-D (Inclusion of diverse population groups); OF3 (Institutional capacity, rule of law, and citizen security); OF4 (Social protection and human capital development); OF5 (Productive development and innovation through the private sector); OF6 (Sustainable, resilient, and inclusive infrastructure); and OF7 (Regional integration).

I. DESCRIPTION AND RESULTS MONITORING

- A. Background, problem addressed, and rationale
- Background. Uruguay faces the challenge of making its long-term economic growth more sustainable, with a view to approaching the income levels of advanced economies.¹ The country's macroeconomic and political stability, robust institutions, and business climate provide an attractive investment climate,² which has contributed to economic growth and poverty reduction (IMF, 2024).³ However, even though Uruguay has made progress on integrating into global markets, it still lags behind other countries with similar levels of development (paragraph 1.3).
- 1.2 Economic context. The country's economic growth slowed over the past decade,⁴ and certain challenges are constraining the main economic engines. While growth over the past few years was driven by exports and investments, today these economic drivers face hurdles to maintaining their growth over time.⁵ After the pandemic-induced recession of 2020, the Uruguayan economy consolidated its recovery, growing 5.6% in 2021 and 4.7% in 2022 due to private investment and increasing foreign demand. This expansion was interrupted in 2023, mainly due to a major drought that affected the country's economic activity, which stalled at 0.4% growth. The economy is expected to bounce back in 2024 and grow 3.7%.⁶
- 1.3 The problem. Uruguay must expand its integration into global markets in order to foster sustainable growth, given its small domestic market and the associated limitations on leveraging economies of scale, accessing more and better knowledge, and increasing business productivity. Uruguay's trade

¹ In 2023, Uruguay's gross domestic product (GDP) per capita was US\$22,560, equivalent to 49% of the average income of the Organisation for Economic Co-operation and Development (OECD) countries (World Bank, 2024).

² Foreign direct investment flows reached 4.6% of the country's GDP in the 2017-2022 period, surpassing the rates in other countries in the region (World Bank, 2024).

Annual inflation reached 9.9% in September 2022 and then began to ease, dropping to 4.1% by May 2024 and thereby completing one year within the Central Bank of Uruguay (BCU) target range (3%-6%). The labor market exhibited vigor in 2023, reaching the highest rates of participation and employment since 2016. From 2020 to 2023, the poverty rate dropped from 11.6% to 10.1% but still remained higher than its 2019 level of 8.8%.

The growth rate fell from an average of 5.4% (2003-2014) to 0.8% (2015-2023). This slowdown derived from the reduced accumulation of factors and stagnated productivity (IDB, 2023). In the past two decades, the country's physical capital accounted for 1.6 percentage points of its negative economic growth, followed by human capital, which accounted for 1.0 percentage points, and total factor productivity accounted for just 0.4 percentage points. Growth was not uniform during these decades.

⁵ The Ministry of Finance (2024) expects exports to grow 9.2% in 2024, and then converge to more moderate rates around 2.7% in the 2025 to 2027 period. It also predicts that investments will fall in 2024 (-3.6%) and 2025 (-0.4%), and then grow around 2% annually from 2026 to 2027.

⁶ IMF (2020).

The following stand out as structural determinants of Uruguay's international positioning: (i) small size of the domestic market; (ii) abundant natural resources; (iii) relatively insufficiency of domestic capital; and (iv) geographic location far from the primary global centers of production and consumption, although close to the main regional ones.

⁸ SFD, 2019; Rodríguez-Clare et al., 2005; ANII, 2021.

openness ratio⁹ is lower than would be expected for a country with its degree of development (Figure 1); it averaged 50% in the 2013-2022 period and has only surpassed that level in the past two years (Figure 2). The country specializes in traditional sectors,¹⁰ which exposes it to volatility from weather events¹¹ and commodity prices.

Uruguay LAC Otras regiones

400

300

100

7

8

9

10

11

12

PBI per capita en dólares corrientes PPP en Ln

Figure 1: Trade in goods and services/GDP 2022¹²

Source: Author's calculation based on World Bank data

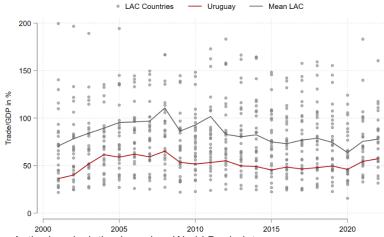


Figure 2: Change in trade in goods and services/GDP

Source: Author's calculation based on World Bank data

⁹ Aggregate value of imports and exports divided by GDP.

Exports are highly concentrated in primary products and manufactured goods based on natural resources (80% in 2022).

¹¹ IMF, 2024.

¹² World Bank, 2024.

- 1.4 The knowledge-intensive goods and services sector has become more important to global trade over the past decade. 13 Knowledge-intensive goods and services have experienced sustained growth, with their share in global exports of goods and services increasing from 20% to 24% between 2012 and 2021. 14 These goods and services include business and information and communications technology (ICT) services, which account for an ever-larger share of exports from developing countries. 15 The growing appetite for digital solutions in various sectors of the economy and the emerging technological trends (characterized by the use of applied artificial intelligence, cloud computing, and cybersecurity solutions) augur well for growth of the sector in the region, supported by advantages conferred by quality of infrastructure, human capital, the business environment, and the sociopolitical context (Deloitte, 2024; McKinsey, 2023).
- 1.5 Uruguay has succeeded in growing and positioning itself in the sector, and it has several of the necessary conditions in place for meeting rising global demand for knowledge-intensive goods and services yet still has room to expand its share of the market. The knowledge-intensive goods and services sector employed nearly 45,000 people in the country in 2023 (accounting for 3.6% of formal jobs), an increase of 22% from 2015 to 2023. Exports of knowledge-intensive goods and services doubled between 2012 and 2023, growing from 4.5% to 7.5% of all goods and services exports to surpass US\$1.6 billion in value. Uruguay has the conditions in place to continue growing in this sector and is the regional leader in technology infrastructure, connectivity, and Internet penetration and speed.¹⁶ The country is known for its good business climate, transparency, and institutional, political, and macroeconomic stability, and it has a favorable framework in place for attracting investment¹⁷ and talent.¹⁸ At the same time, it does not have enough workers with the necessary skills to continue expanding the sector, and its exports per capita lag behind other developing countries that also export knowledge-intensive goods and services.19 The evidence on Uruguay and other regional leaders shows that unlike in other emerging economies, the competitiveness of Uruguay's knowledge-intensive goods and services sector is not based on low costs of production; rather, the existence of competitors with lower costs represents a challenge to be overcome through a commitment to quality.20

Knowledge-intensive goods and services sectors are defined as sectors in which the percentage of science, technology, engineering, and mathematics (STEM) workers and the emphasis on research and development are both above average (optional link 7).

¹⁴ Optional link 13.

WTO, 2022. Services have taken on greater importance in global trade, with their share increasing from 9% to 25% between 1970 and 2020 (WTO, 2021).

According to the 2023 Network Readiness Index, the country ranks among the top in the region for use of digital tools in government and civil society, the political and regulatory climate, and infrastructure.

¹⁷ All told, 84% of foreign companies are satisfied with the investment climate and 40% would reinvest in Uruguay in the next five years. (<u>Uruguay XXI, 2023</u>).

Law 20,191 to encourage ICT sector technicians and professionals to settle in Uruguay and its <u>regulatory</u> decree offer tax incentives to foreigners and nationals who settle in the country.

¹⁹ Optional link 13.

²⁰ CUTI, 2024; Hallak, 2023; López & Ramos, 2018.

- 1.6 Evidence shows that human capital is key to international positioning, inasmuch as it fosters increased exports, innovation, and investment in knowledge-intensive goods and services and encourages both local and qlobal companies to demand new advanced technologies. The evidence also shows that the development of human capital stimulates exports,21 innovation,22 and foreign direct investment²³ (optional link 3) in more skills-intensive sectors. Specifically, an increase in the number of workers who have a university or higher degree positively impacts investment in research and development (R&D)²⁴ and in export quality and quantity. Sorbe et al., 2018 show that the percentage of workers with a post-secondary education is higher in the knowledge-intensive goods and services sector than in other services and manufacturing sectors.25 Likewise, the adoption and promotion of knowledge-intensive goods and services solutions may lead to improvements and boost productivity in traditional sectors.²⁶ Furthermore, demand is increasing around the world for human capital in areas that require advanced digital skills (like AI and data science), as well as for cognitive and soft skills for the development of new technologies.27 The skill gap (scarcity of qualified human capital) and the barriers to attracting talent constitute the main obstacles to transforming businesses and integrating them into the global market.²⁸ According to the IDB Labor Observatory, in Uruguay 37% of job vacancies are in knowledge-economy sectors; in Chile, the figure is 29%; and in Argentina, it is 38%. This statistic demonstrates that in Uruguay, there is a significant mismatch between the ICT-related skills available and the business demand for them.29
- 1.7 Uruguay does not currently conduct a systematic survey of the business profiles and needs required to integrate its knowledge-intensive goods and services sectors into the global economy. Surveying business needs is fundamental in order to identify and prioritize the need and opportunities for training human capital in key knowledge and technology areas.³⁰ Certain chambers of commerce and other institutions have conducted partial surveys. However, these surveys do not cover all regions, nor are they specific enough with

²¹ Ma, 2024; He et al., 2024; Chuang, 2000; Ariu, 2022; Toledo, 2017; Wagner, 2011; Amoroso and Müller, 2018.

Stuen et al., 2012; Andrews, 2023. Companies' human capital influences their likelihood of exporting and the intensity of their exports (López and Serrano, 2019; Ruzzier et al., 2007); boosts labor productivity (Mankiw,1992); and stimulates innovation capacity and the creation of new technologies, products, and processes (Lucas, 1988; Romer, 1990; Aghion, 1998); (Nelson, 1966; Benhabib, 1994).

Kheng et al., 2017; Sadeghi et al., 2019; Tsamadias et al., 2018; Alvarado, 2017; Pantelopoulos, 2022; Abbas et al., 2020.

²⁴ The decision to make knowledge-intensive investments is positively correlated with access to higher education (Falck, 2019).

In 2010, close to or more than 50% of employees in professional services, ICT, and finance had a post-secondary education, while in manufacturing and other services, less than 20% did.

²⁶ Uruguay has experience developing traceability systems in agriculture and a growing agtech sector (Bisang et al., 2022).

²⁷ Di Capua et al., 2020.

²⁸ WEF, 2023.

One-fifth of job postings in Uruguay are looking for talent with training in ICTs, whether for technology companies (two-thirds of searches) or nontechnology ones. (CUTI and Advice, 2023).

^{30 (}Baptista, 2024); (ConnectAmericas, 2024). Only 9.5% of the surveyed companies state that their internationalization needs and capacities have been assessed.

regard to the profiles needed in the workforce.³¹ Furthermore, changes in economic, social, demographic, and technological trends require flexible educational systems that can reflect those changes in their academic programs, content, and assessments of the skills attained. In turn, this requires regularly analyzing the information for the parties responsible for decision-making and the education professionals who lead the development and deployment of new curricula.³²

1.8 Nevertheless, the data available suggest that Uruguay's supply of human capital with the necessary skills in knowledge-intensive goods and services is limited, in both the intensive and extensive margins, which restricts companies' capacities to scale up their operations. The country's slow demographic growth, the natural restriction of its scale, and low rates of graduation from secondary school³³ are all challenges in terms of leveraging the talent supply to drive growth at knowledge-intensive goods and services companies.34 Although Uruquayan talent is known for how it easily adapts to new technologies, various surveys, of both foreign and local companies, highlight the scarcity of digital talent as one of the three main obstacles to Uruguay's integration into global markets.35 There is a gap between the training available (occupational training and education) and the demand for skilled labor, 36 and the country's workforce exhibits clear deficits in terms of skills and abilities in knowledge-intensive disciplines. Uruguay stands out in the region for its high percentage of STEM graduates, but when compared with a selection of developing countries that export knowledge-intensive goods and services, it ranks near the bottom of the list (optional link 13). An estimated 7,700 graduates will be needed to close this gap.³⁷ In 2022, just over 1,200 students graduated from the post-secondary and university ICT training education system, while there were over 17,000 openings for ICT-related job positions.38 An analysis of business demand for workers with post-secondary training, conducted by the Technological University of Uruguay (UTEC), found that in seven thematic areas,39 over 75% of job opportunities were in ICT, and that short, modular, flexible courses (continuing education) and international certification of degrees were both needed. Likewise, digital technology job postings

The Program to Support Chile's Global Services Export Sector (<u>4362/OC-CH</u>) surveys corporate demand for digital training, based on information from 400 ICT companies with R&D departments, to establish a list of training priorities.

³² European Training Foundation, 2021.

³³ The secondary school graduation rate is low (only 49% of young people ages 21 to 23 completed their studies, while in Latin America and the Caribbean, 67% did, and in the European Union, the rate is 87%) (IDB, 2023).

³⁴ The average number of workers hired in knowledge-intensive industries is nearly double the average number hired in the economy as a whole.

^{35 (&}lt;u>Uruguay XXI, 2023</u>); (CUTI, 2023); (Lalanne, 2023). According to the <u>Enterprise Survey</u> (2017), 37% of Uruguayan companies have stated that the inadequately educated workforce is their primary challenge (compared with 27.5% of companies in the Latin America and Caribbean region as a whole).

³⁶ These ICT training efforts by public and private institutions did increase the number of graduates able to enter companies in the sector in Uruguay but were still insufficient (CUTI, 2021).

³⁷ CERES, 2022.

³⁸ CUTI, 2024; CUTI and Advice, 2023.

The thematic areas prioritized by UTEC are: (i) food; (ii) environmental sustainability; (iii) automation and logistics; (iv) ICTs; (v) innovation and entrepreneurship; (vi) audiovisual; and (vii) forestry/timber.

require candidates to have a postgraduate education in specific areas. To address this lack of skilled workers, the country will have to promote communication between training institutions and industry, train highly qualified professionals, and help place them in the companies.⁴⁰ Since 2019, through the Uruguay Global I program (4658/OC-UR), executed by UTEC, support has been provided to design and execute flexible postgraduate and continuing education training programs, in partnership with universities at the forefront of knowledge, to close this gap.⁴¹

- Although Uruguay's professional and technical academic offerings have expanded over the past decade, challenges remain with regard to linkages to the productive sector and the country's development strategies. In 2012, UTEC was established through Law 19,043 as a public, autonomous university specialized in technological fields, with the objective of making post-secondary university education more accessible, especially for areas outside the metropolitan capital region. UTEC seeks to contribute through training proposals aligned with the regions' productive developments, and its mission includes conducting university outreach and strengthening the connection between technology and production. Despite UTEC's expansion of its academic programs and number of slots, student demand for ICT careers in regions currently exceeds supply, given the high rate of employability that these degrees confer. However, the scarcity of teachers limits the growth and sophistication of the academic programs designed to meet the demand from potential students and companies.
- 1.10 This shortage of workers with digital skills is more pronounced outside the country's capital. Currently, digital skills are highly concentrated in Montevideo (85%).⁴⁶ In 2023, while demand for ICT profiles outside the capital reached 2,500 openings (15.7% of the total), only 950 students entered technical and university education programs in ICT in the regions⁴⁷ (meaning there were 2.63 job openings for each student starting ICT training). Traditionally, the post-secondary and university education offerings have been concentrated in the capital, especially for higher-level training programs⁴⁸ (87% of students entering graduate and postgraduate ICT degree programs).⁴⁹ Evidence suggests that the regional differences in human capital help explain regional disparities in economic development;⁵⁰ less-educated people who live farther away from the capitals have

The hybrid modality and state-of-the-art content led to high retention (72%) and graduation rates (55% of students obtained at least one degree; in postgraduate programs, 62% did) (optional link 9).

⁴³ UTEC has three regional technology institutes (Southwest, Central, and Southern) and contributes to the National Education Policy Plan by creating opportunities for technological education in various regions of the country in line with the productive sector's local and national needs.

47 In all, 87% of post-secondary education programs and 98% of postgraduate ones (<u>CUTI, 2024</u>).

⁵⁰ Diebolt & Rippe, 2023; Aboal et al., 2018.

⁴⁰ Bukstein et al., 2018.

⁴² (Di Capua, 2020).

At present, UTEC has 1,200 spots available for ICT; on average, it is unable to place 300 students each year.

⁴⁵ All told, 75% of graduates work in ICT sectors (UTEC census).

⁴⁶ CUTI, 2023.

⁴⁸ Baptista, 2024.

⁴⁹ CUTI, 2024.

fewer job and continuing-education opportunities;⁵¹ meanwhile, universities contribute to the economic development of their regions by attracting highly skilled staff, students, professors, and other foreign members of the academic and scientific community.⁵²

- 1.11 The international positioning process requires a different skill set than is needed for serving the local market.⁵³ Evidence shows that business integration into global markets and inclusive workforce development strategies—geared towards expanding workers' range of skills—are complementary processes that enable a better transition from supplying skilled human resources to software products⁵⁴ and generate positive externalities (spillovers) to all sectors of the economy, through the adoption and use of technologies. In addition, advances in artificial intelligence (AI) pose additional challenges to the skill set required for internationalization. Accenture (2023) found that across all industries, 40% of all working hours may be impacted by large language models; this could affect highly skilled and unskilled workers.⁵⁵
- 1.12 **Gender and diversity.** Women are underrepresented in STEM education and careers (only 12.2% of STEM graduates in Uruguay are women),⁵⁶ as well as in exporting companies.⁵⁷ Gender and diversity equity is an institutional priority for UTEC.⁵⁸ However, the university faces challenges to ensuring that women are equally represented (only 32% of students are women),⁵⁹ as well as with their low rates of participation in STEM career tracks (21%).⁶⁰ Likewise, UTEC administrative records and the UTEC census do not track diversity,⁶¹ although the university follow-up report highlights the need to improve the administrative information systems with regard to diversity and indicates that the current labels lead to errors and delays in analysis and limit the university's capacity to assess the makeup of its educational community (UTEC, 2021).
- 1.13 In addition to human capital, internationalization requires business development services, which are currently concentrated in the capital.

⁵¹ European Training Foundation, 2021.

⁵² Olo et al., 2021.

⁵³ Brambilla et al., 2017.

⁵⁴ In 2022, 80% of IT sector exports were in the custom software development and services segment (CUTI, 2024).

Cazzaniga (2024) and Alonso (2022) show that global adoption of Al may also have significant effects on economic inequality around the world, driven by the potential relocation of activities to advanced economies.

⁵⁶ World Bank, 2020.

⁵⁷ In all, 26% of exporting companies in the services sector are led by women, while 32% of exporting companies in the goods sector are (CINVE, 2023).

The UTEC Strategic Plan includes gender targets and provides for bolstering the gender, inclusion, and diversity policy and working on the educational inclusion of underrepresented sectors. In 2019, the university established a Diversity Committee, and since 2020 it has developed multiple digital inclusion milestones (UTEC, 2024).

⁵⁹ UTEC, 2024.

Variables that influence this gap: Women receive only 36% of scholarships awarded (UTEC, 2024), and women with children drop out at a higher rate than do men with children (UTEC, 2021). There is a gender gap in digital skills: 11 percentage points in favor of Uruguayan men (ECLAC, 2022).

⁶¹ Classifications for LGBTIQ+, Indigenous, or Afro-descendant persons, and persons with disabilities.

Marketing agencies have limited coverage in the regions, and companies have limited knowledge of business development services for international positioning—in terms of access to new markets and to new customers abroad—and of their potential impact.⁶² The Investment, Export, and Country Brand Promotion Agency (Uruguay XXI) and the National Agency for Research and Innovation (ANII) do not have a physical presence in the regions.⁶³ Knowledge-intensive goods and services sector companies are concentrated in Montevideo and in the country's southern regions. Although the National Economic Development Agency (ANDE) does have regional offices, it primarily focuses on microenterprises and on management and administrative aspects rather than on internationalization. Therefore, business development services are not used intensively in the regions, especially ones provided by agencies that do not have a local presence that would facilitate access.⁶⁴ Likewise, agencies have been shown to fail to coordinate to comprehensively serve companies.⁶⁵

- 1.14 UTEC has sophisticated infrastructure and experience providing technological services to the productive sector, although with a limited reach. In line with its strategic plan (optional link 4), UTEC has pilot and testing laboratories and R&D centers in its regional technology institutes that are coordinated via a technological services platform in operation since 2021.66 At present, UTEC only has 35 agreements with companies, 70% of which are at the Southwest regional technology institute,67 which means it has an opportunity to take better advantage of its infrastructure. International good practices indicate that world-class universities engage in extension activities to coordinate better with the private sector.68
- 1.15 There is room to improve the coordination of policies to attract investment, promote exports, and train human capital to strengthen knowledge-intensive goods and services, especially at the regional level beyond the capital. Policy coordination makes it possible for the country to more effectively manage available resources, create synergies between agencies, mitigate information asymmetries, and optimize development instruments. Capacity-building is essential for enabling ecosystems that support the region's productive

⁶² Most public and private agencies that offer business development services in the interior (80%) do not have the capacity to support integration into global markets on their own (optional link 10).

According to information from ANII, between 2020 and 2022, just 19% of all companies supported by ANII were located in regions receiving priority attention under the program (see Annual Monitoring Reports for ANII Activities). Meanwhile, in the latest round of commitments to Uruguay XXI targets, the institution said it would support 45 companies outside the capital region, equal to 11% of all companies receiving support during the year. The primary motive cited by companies for not requesting public funds was that they do not need them, followed by that they did not know about them (30%) (ANII, 2022).

⁶⁴ Optional link 10.

⁶⁵ Startupblink, 2024

UTEC approved a policy on selling services to companies or institutions to strengthen its role as an agent for development and disseminator of knowledge and capacity-building. Since 2021, it has received 200 external demands for services at the regional technology institutes, and it has provided 108 services. The remaining demands were not met due to administrative processing delays (35%), unaccepted proposals (30%), lack of funds to finance them (23%), lack of equipment (5%), and other reasons (7%).

⁶⁷ UTEC, 2024.

⁶⁸ Olo et al., 2021.

⁶⁹ Hallak et al., 2024.

development and foster its integration into global markets. International evidence shows that the lack of interaction and incentives for collaboration between the public sector, research centers, and the business community slows the development of knowledge-intensive goods and services in the countries, by hampering workforce training, which would support improvements in production capacity and the innovation ecosystem.⁷⁰

- 1.16 Climate change. Uruguay is especially vulnerable to the effects of climate change⁷¹ (approximately 70% of the country's exports are based on agroindustrial production). Climate change is expected to be a factor that increasingly conditions integration into global markets, through various demands on production, like reduction of the carbon footprint and the application of instruments like the carbon border adjustment mechanism, and through regulations, like the European Green Deal. The country must continue to expand its efforts towards decarbonization and greater climate resilience, in order to comply with the targets and commitments it took on under its nationally determined contributions. Capacity-building is a key aspect for progress on this challenge. This operation seeks to strengthen the UTEC's capacities in this regard.
- 1.17 **Program strategy.** The program will continue to foster digital skills training of the workforce with a view to integrating knowledge-intensive goods and services into global markets and strengthening the UTEC's capacities to better systematize the specific demands of companies with internationalization potential, so as to translate them into academic programs (both continuing education and postgraduate) and leverage the available infrastructure, outreach, and provision of business development services for international positioning with a regional focus. To that end, the program will coordinate actions with other agencies like ANII and Uruguay XXI. Likewise, it will help improve coordination of the policies to promote investments and exports and to train workers, with a heightened focus on the regions. Academic programs adapted to the needs of companies working in state-of-the-art areas will be offered in partnership with universities at the forefront of knowledge, so as to encourage the generation of new technological skills nationally and regionally. Scholarships will be provided for Uruquayan professors and students, and job placement programs will be available to promote the hiring of digital talent and the internationalization of companies. The project will help narrow the geographical gap between Montevideo and the rest of the country⁷² in at least two ways. First, it will contribute to human capital formation in digital sectors, one of the segments of the labor market that pays above average (CUTI, 2024). Second, in so doing, it will help close income gaps (OTU, 2024, and Aboal et al., 2018) and contribute to the consolidation of the country's productive fabric, allowing companies to incorporate technology and innovation (UTEC, 2020) and promoting their internationalization.73

⁷⁰ Landaverry and Serafim, 2019. When the education offering is improved, the newly trained workers might emigrate if local conditions prevent them from finding employment (Baptista, 2024).

⁷¹ Second Nationally Determined Contribution.

⁷² (OTU, 2024; Aboal et al., 2018; Martínez and Rodríguez Miranda, 2017).

Activities to promote a productive framework and the internationalization of companies both have positive implications for local development, whether participation in new economic gains (Rodríguez Miranda, 2017) or the higher wages paid at export companies (Lalanne, 2023).

1.18 Bank experience and lessons learned. The Bank has executed various operations in Latin America and the Caribbean that demonstrate the effectiveness of the actions proposed in this one. Human capital: The Support for Business Development Services to Paraguayan Exporting Companies program (operation 3865/OC-PR) and the Program to Support Chile's Global Services Export Sector (operation 4362/OC-CH) demonstrated the effectiveness of strengthening human capital through curricula co-created with the productive sector to respond to the sector's specific needs; over 14,500 persons were trained (70% secured employment and received an average wage premium of 50%). Internationalization: The Bank has worked with nearly all of the countries in Latin America and the Caribbean on issues of integration into global markets, and even created the only network for the exchange of knowledge and best practices among investment and export promotion agencies. In Uruguay, the Bank has supported the strategy for integrating knowledge-intensive goods and services into global markets over the past decade: first, through the Program to Support Global Export Services (operation 2590/OC-UR), which created the investment aftercare unit, established a team of specialists on promoting exports of and investments in global services, and set up finishing schools to expand the availability of skilled workers in services; and subsequently, through the Investment, Trade, and Innovation Framework Modernization Program II (operation 4857/OC-UR), which supported the design and implementation of adjustments to the regulatory framework to promote investment in knowledge-intensive services; as well as through the Uruguay Global I program (operation 4658/OC-UR), which modernized and strengthened UTEC's continuing education and postgraduate offerings on advanced digital skills for internationalization, through partnerships with international academic associates like MIT and Harvard, Universidad de los Andes (University of the Andes), Universidad Oberta de Catalunya (Open University of Catalonia), and other leading institutions like Fab Lab Barcelona, among others, to develop curricula on cutting-edge topics like data science, AI, machine learning, and cybersecurity. The Bank supported greater coordination of advanced digital skills training policies and business development policies in knowledge-intensive goods and services sectors. To date, over 650 students have enrolled in advanced digital skills programs (38% women, 34% residents of the regions⁷⁴ and 5% living abroad)⁷⁵ and 78 public and private university professors received training at MIT through in-person and online classes on curriculum design, strategic planning, remote learning, etc. Likewise, the operation led to the establishment of 50 new enterprises and innovations.76 This first experience served as a pilot, and the new operation discussed herein seeks to afford continuity and foster more sophisticated development of advanced digital skills for integration into global markets, as well as to ensure the Bank will continue to add value by providing a greater regional focus and deeper engagement with the needs of knowledge-intensive goods and services companies. The following lessons learned were taken into account in the design of this program: (i) conducting a systematic survey of business demands makes it possible to close the gap between

⁷⁴ Student graduation rates have been higher in the regions than in the capital (59% versus 55%) (optional

Student graduation rates have been higher in the regions than in the capital (59% versus 55%) (optional link 9).

Optional link 7 describes the program impacts to date on the evolution of graduates' incomes, making it possible to evaluate student career paths for the first time, using UTEC administrative records; this is included in the Bank's value added.

⁷⁶ These new enterprises have created 44 new job positions and invested over US\$440,000 to date.

the supply of and demand for digital skills; (ii) including thematic areas and state-of-the-art, hybrid, flexible learning methodologies, and training local university professors, lead to spill over into the local academic ecosystem; (iii) developing academic proposals based on the demands of the private sector increases the impact students' studies will have on their career paths; and (iv) regularly monitoring and evaluating students' paths, having sophisticated instruments in place, and accessing administrative records makes it possible to design impact assessments and make evidence-based policy decisions (optional link 4).

- 1.19 **Sustainability.** This is a competency-transfer program that, among other measures, provides for training teachers, who will be able to transfer the knowledge and methodologies they acquire through agreements with foreign universities to other professors in the local training ecosystem. In turn, the students who graduate from this program will, in the future, be able to become professors at UTEC or other local universities, as occurred with the Uruguay Global I program.
- 1.20 **Programmatic approach.** The operation falls within the Bank's long-term strategy of supporting the sector in Uruguay and is aligned with the launch and strengthening of the Center for Childhood and Adolescent Education (CEIBAL), ANII, and UTEC, which are regional leaders in digital skills training and innovation for internationalization. This program supports coordination among these agencies and their regional development instruments. It is complemented by the following projects: AcelerIA (IDB Lab, to be executed by UTEC), on the development of AI strategies for workforce reskilling and upskilling (operation ATN/OC-19835-UR), which focuses on workers whose jobs may be eliminated or who may be replaced by people with more digital and Al skills; a portion of the workers who improve their digital and Al skills as a result of this program are expected to then be able to access more advanced trainings, like the ones offered under the operation described herein; MSME Digital Transformation Program (operation 5294/OC-UR), which will provide training on basic digital skills; Support for Strategic Research Groups to address territorial challenges with R&D&I in Uruguay (operation ATN/OC-19597-UR), which promotes the development of strategies for collaboration and open innovation pilots among researchers, subnational governments, and the productive sector, as well as the generation of regional capacities for working on producing R&D&I agendas; and Strengthening Smart City Capabilities in Uruguayan Medium-sized Cities (operation ATN/KP-19606-UR) to strengthen the departmental government's capacities for providing smart urban services. In addition, the operation is expected to create a business environment that will make it possible to generate prospects for IDB Invest.
- 1.21 **Strategic alignment.** The program is aligned with the IDB Group Country Strategy with Uruguay 2021-2025 (document GN-3056), in the priority area of sustainable productive development and the strategic objective of improving international trade positioning. It is also consistent with the IDB Group Institutional Strategy: Transforming for Scale and Impact (document CA-631), insofar as it aligns with the objective of bolstering sustainable growth and the operational focus areas of regional integration; productive development and innovation through the private sector; social protection and human capital development; biodiversity, natural capital and climate action; and gender equality and inclusion of diverse population groups; and with the Integration and Trade Sector Framework Document (document GN-2715-11), by fostering services to promote business development and high-quality investments. The program aligns with gender equality and the inclusion of diverse groups through its creation of opportunities for women and

diverse groups in digital skills trainings, thereby improving their job performance as well as the technological capacity of exporting companies. It also aligns with the Labor Sector Framework Document (document GN-2741-12), in the strategic lines of labor productivity growth and access to employment, and with the Skills Development Sector Framework Document (document GN-3012-3), by providing educational programs that enhance the training of advanced human capital.

- 1.22 **Paris Alignment.** This operation has been analyzed using the <u>Joint Multilateral Development Bank Methodological Principles</u> for Assessment of Paris Agreement Alignment and the <u>IDB Group Paris Alignment Implementation Approach</u> (document GN-3142-1), and it was established to be: (i) aligned with the Paris Agreement adaptation target; and (ii) universally aligned with the Paris Agreement mitigation target (optional link 12).
- 1.23 **Climate finance.** In all, 9.63% of the loan proceeds are considered to be climate finance, as they are invested in climate change mitigation and adaptation activities, according to the joint methodology of the multilateral development banks (optional link 12).

B. Objectives, components, and cost

- 1.24 The general objective of the program is to promote Uruguay's integration into global markets by developing skills for new technologies in knowledge-intensive goods and services sectors. The specific objectives are: (i) to increase the supply of human capital with the advanced digital skills needed in knowledge-intensive goods and services sectors; and (ii) to build capacity for international positioning at companies in knowledge-intensive goods and services sectors and at companies that use knowledge-intensive goods and services in their processes and products. The specific operation of each component is described in the Program Operating Regulations.
- 1.25 Theory of change. The program uses the results-based financing model, in which the expected changes are achieved through technical support (guidance for students, and outreach and advising for companies). The conceptual foundation for the interventions aims to: (i) increase the availability of human capital for internationalization, based on the demand for profiles and skills identified by the companies; and (ii) strengthen the international positioning capacities of knowledge-intensive goods and services companies and of companies that use knowledge-intensive goods and services in their processes and products. With respect to human capital, the identified causes are associated with the existence of unmet demand for training courses on these skills, especially at the regional level, as well as with the shortage of teachers to lead such courses. As for companies' needs, the causes identified have to do with the limited awareness of the benefits and, thus, scarce use of the business development services geared towards integration into global markets, in conjunction with the lack of monitoring and evaluation mechanisms for these services. To address these challenges, the program will provide support for: (i) training human capital on digital skills, by establishing new postgraduate and continuing education curricula that align with companies' needs, as well as by training and attracting local and foreign teachers and students (through scholarships and outreach strategies); and (ii) building companies' international positioning capacities, by financing surveys of companies to gain an understanding of their digital skills needs and supporting and advising

companies on the availability and use of business development services and other services geared towards internationalization (required link 2).

- 1.26 Component 1. Human capital for internationalization (US\$5,174,291). This component seeks to build skills for using new advanced technologies by creating new specialization programs (in partnership with foreign universities) for development of the academic programs.77 This component will finance the costs necessary to obtain results, in the following lines of support: (i) partnerships with international academic associates to develop novel curricula and deploy them in the country in postgraduate and continuing education programs in line with demand from the private sector; (ii) hiring of professors and coordinators responsible for imparting the academic programs; (iii) participation of international professors in the academic programs; (iv) scholarships for resident teachers and students, to prioritize the participation of women and residents of the regions;78 (v) teacher training courses on new technologies (AI), climate change, and incorporation of the gender and diversity perspective; (vi) development and implementation of a program international positioning strategy to attract and recruit new students and teachers, in Uruguay and abroad;79 and (vii) development of new curricula focused on the regions, based on demand from companies to expand the development of digital skills and encourage the incorporation of technologies in the companies, prioritizing the participation and graduation of women.
- 1.27 Component 2. Strengthening companies' capacities for integrating into global markets (US\$2,294,132). This component aims to strengthen the internationalization capacities of knowledge-intensive goods and services companies and companies that use knowledge-intensive goods and services in their processes and products, through improved coordination between business development agencies. The component will finance the costs of achieving results, in the following lines of support: (i) systematic survey of knowledge-intensive goods and services companies' demand for training on advanced digital skills and business development agencies for internationalization;⁸⁰ (ii) diagnostic assessments of factors that need to be strengthened at the individual company level for international positioning (administrative aspects, technical requirements,

These academic programs seek to respond to demand identified by the private sector. They will be geared towards the digital, technical, and soft skills that workers need, as well as to the technical, commercial, and regulatory requirements for exportation. Priority will be placed on cultivating knowledge of climate change and compliance with environmental standards for trade.

⁷⁸ "Regions" are understood to mean the departments located outside the capital (optional link 4).

⁷⁹ This strategy with a gender perspective will be designed and implemented with Uruguay XXI.

The UTEC study of demand (optional link 8) identified the following priority areas for talent development for sectors with the potential to expand to international markets: (i) data science and analysis; (ii) Al; (iii) management of biotechnology companies; (iv) cybersecurity; (v) business sustainability management; and (vi) technology-linked logistics. These areas will steer the offerings to be made available in the first year of the program. Subsequently, a diagnostic assessment will be carried out to survey the demand from local companies as well as foreign ones established in the country; this assessment will be supplemented with interviews. The aim will be to identify the skills required for the technologies, which will entail measuring the gaps in the various digital training specialties, and in institutional strengthening for internationalization. This will be done with Uruguay XXI and ANII and supplemented with focus groups with experts on future industry needs to define the training strategy and identify challenges that can be addressed with open innovation mechanisms. A gender perspective will be incorporated. This is based on the successful experience in the Program to Support Chile's Global Services Export Sector (4362/OC-CH) as well as UTEC's successful five-yearly supply and demand surveys (optional link 8).

strategy, talent, gender and diversity, etc.); (iii) support for and advising of direct and indirect export companies and companies with export potential in the regions to foster awareness of and access to business development agencies for integration into global markets⁸¹ and the development of productive linkages, offered by UTEC⁸² (through its regional technology institutes) and public marketing agencies, especially ones without a physical presence in the regions;⁸³ and (iv) development and implementation of a platform for information, coordination, monitoring and evaluation, and dissemination of the results of the students and companies served by the program (to include a gender and diversity perspective⁸⁴).

1.28 **Administration and management (US\$531,577).** The following activities will be financed under this category: (i) program management; (ii) midterm and final evaluations; and (iii) technical audits to verify milestones for disbursements. The details are described in the Program Operating Regulations.

C. Key results indicators

- 1.29 **Expected impacts and results.** The program will positively impact integration into global markets. Specifically, it is expected to have an impact on: (i) knowledge-intensive goods and services exports in relation to total exports; and (ii) the AT Kearney global services location index score.
- 1.30 In line with these impacts, a set of outcomes are expected, some of which will be used to trigger program disbursements, and others, for monitoring. The indicators that will trigger disbursements are the following: (i) agreements in force with academic partners (due to the institutional strengthening that contributes to outcome indicators 1.1 and 1.2); (ii) new students enrolled in programs (intermediate outcome); (iii) program graduates; (iv) increase in the export preparation score for export-oriented companies that have received support; (v) companies served that access business development services for the first time; and (vi) student and business information and pathway platform operating with inclusion of classifications for LGBTIQ+, Afro-descendant, and Indigenous persons, and people with disabilities (institution-strengthening output). The additional monitoring indicators are: (i) residents of the regions enrolled;

Regional coordinators will be selected and trained so they can become familiar with the business development services available in the country, provided by agencies in the business ecosystem that do not have a presence in the regions, like Uruguay XXI, ANII, and the National Institute for Employment and Professional Training (INEFOP), and learn how to steer companies in line with the identified needs so as to improve their capacities for integrating into the global market, while mainstreaming the gender perspective.

The University will seek to improve its <u>technology extension services</u> for internationalization; will promote, through new courses of study, development of export profiles; and will develop business capacities and solutions to business challenges. The component will promote: (i) mentorships for companies; (ii) the provision of workspace at UTEC and use of the available infrastructure (laboratories and R&D experimental facilities); (iii) activities to connect students and companies; and (iv) student internships at companies, to promote R&D&I work in the business sphere, facilitate the transfer of research projects that were previously started in the academic sphere, foster student job placement in the private sector, and hold activities to bring together companies and academia so as to advance companies' integration into global markets.

The program will allow UTEC to get closer to the productive sector, as well as to improve its institutional coordination, through establishment of a national committee for coordinating regional internationalization policies, to be made up of the Strategic Committee, Uruguay XXI, and ANDE (Program Operating Regulations).

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⁸⁴ For LGBTIQ+, Indigenous, and Afro-descendant persons, and people with disabilities.

- (ii) teachers trained on climate change issues; (iii) women scholarship recipients; (iv) incomes of postgraduate program graduates; (v) companies served in the regions that access business development services; and (vi) companies served that become new exporters (see Annex II, required link 2, and the monitoring and evaluation plan).
- 1.31 **Economic evaluation.** A cost-benefit evaluation was performed of the program, both at an aggregate level and by component, with a time horizon of 10 years. This evaluation shows that the program has a positive net present value of US\$4.3 million and an internal rate of return (IRR) of 29%, higher than the discount rate used by the Bank of an annual 12%. By component, the IRR is 28% for Component 1, and 31% for Component 2. These results remain robust under a sensitivity analysis of the main program parameters: wage premium for training and productivity increase through exportation (optional link 3).
- 1.32 **Beneficiaries.** Four main groups will benefit from this program: (i) UTEC students (an estimated 440 students will receive direct support under Component 1); (ii) women students, residents of the regions, and teachers, who will benefit from the approximately 45 scholarships to be provided under Component 1; (iii) 150 companies located in the regions that are direct or indirect exporters or are considering putting their goods and services on the international market; and (iv) 90 companies provided with a diagnostic assessment with regard to opportunities for internationalization and the hiring of skilled workers, through Component 2. Selection criteria will be defined in the Program Operating Regulations.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 This operation will be for US\$8 million, financed from the proceeds of an Ordinary Capital loan. The financing instrument will be a loan based on results (LBR), whose use is justified inasmuch as it will: (i) back the UTEC Strategic Plan in delivering results; and (ii) incentivize a change in teachers' behavior, encouraging them to offer programs with new methodologies and cutting-edge curricula, in accordance with the policy applicable to the LBR instrument (GN-2869-11). UTEC has successfully executed an LBR in the past (4658/OC-UR) and has adequate legal authority, governance, and institutional environment as well as sufficient technical and management capacity to administer and monitor an LBR. The excellent experience with the earlier operation led Uruguay to continue with this modality given its advantages in terms of: (i) targeting execution to achievement of the development objectives, reducing transaction costs with the Bank; and (ii) aligning with the National Education Policy Plan 2020-2025. The LBR enhances the Bank's value added by aligning the incentives to improve program performance and expanding the space for technical contribution; the focus on results makes it possible to align the incentives for improving program performance, by changing the nature of the dialogue with the executing agency (paragraph 2.3).
- 2.2 The budget is shown by component in Table 1, and the disbursement schedule is presented in Table 2. The program disbursement period will be five years. This term, which fits with UTEC's institutional capacities and the experiences with prior Bank operations (paragraphs 1.18 and 1.20), is considered suitable for executing the activities and obtaining the expected results. Disbursements will be made after

verification of the aforementioned results indicators (paragraph 1.29), which are specified in Annex II and the monitoring and evaluation plan.

Table 1. Estimated program costs (US\$ millions)

Components	IDB	%
Component 1. Human capital for internationalization	5.20	65.00
Component 2. Strengthening companies' capacities for integrating into global markets	2.30	28.75
Administration and management	0.50	6.25
Total	8.00	100.00

Table 2. Disbursement schedule (US\$ millions)

Category	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Initial disbursement (up to 20%)	0.765					0.765
Disbursement for previously reached results	0.311					0.311
Disbursement for results obtained post-eligibility		1.880	2.138	1.819	1.851	7.689
Initial disbursement discount		-0.248			-0.516	-0.765
Initial disbursement discount %		32%			68%	
Total	1.076	1.632	2.138	1.819	1.335	8.00

2.3 Fulfillment of requirements for use of the LBR instrument. In 2021, during execution of Uruguay Global I, an institutional capacity assessment was conducted of UTEC. This analysis found that UTEC had the necessary legal and governance powers and duties as well as a suitable institutional environment and sufficient technical and management capacity to administer an LBR. UTEC's procurement and financial management systems were also assessed and found to be compatible with fiduciary principles and good practices in procurement. The institutional capacity assessment was repeated during preparation hereof, and it confirmed that UTEC's institutional capacities and procurement systems continue to be suitable for an LBR. It further demonstrated that UTEC's institutional integrity regulations and mechanisms are appropriate. In view of the aforementioned institutional aspects, the program is deemed to comply with the requirements for use of an LBR (GN-2869-10 and its guidelines set out in GN-2869-11).

B. Environmental and social risks

2.4 Pursuant to the Environmental and Social Policy Framework, the program was classified as a Category "C" operation, inasmuch as it is expected to have minimal to no negative environmental and social impacts.

C. Fiduciary risks

2.5 During program preparation, no fiduciary risks that would adversely affect execution were identified. During execution of the operation, the fiduciary team will provide support to the executing agency as per GN-2869-10 and the guidelines for LBR, and the risk identification and management process will be maintained.

D. Other key issues and risks

2.6 Three low-level development risks were identified based on the experience with program 4658/OC-UR:85 (i) institutional environment, given the many entities that will participate in the program; (ii) political environment, due to the change of government, which will be mitigated by the Bank's efforts to maintain a high-level dialogue with new authorities and engage in regular opportunities to coordinate with the Strategic Committee; and (iii) human resources, for program execution and evaluation. The potential environmental and social risks were evaluated by the project team and are considered to be low risk.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Borrower and executing agency.** The borrower is the Eastern Republic of Uruguay, and the executing agency is UTEC. UTEC is a public, autonomous university⁸⁶ created by Law 19,043 of 2012, with the mission and responsibility to provide public post-secondary university education and to engage in research, innovation, and community service activities in the regions. UTEC has experience in Bank projects. Since 2021, it has executed 4658/OC-UR and its technical cooperation, performing well in terms of financial execution and fulfillment of results indicators. As executing agency, UTEC will have the following responsibilities: (i) support the actions required for fulfillment of results; and (ii) monitor and gather information on the performance indicators necessary to evaluate results, once disbursements have been made.
- 3.2 **Execution mechanism.** A program execution unit at UTEC will be responsible for program execution. This program execution unit will act as the Bank counterpart, will supervise progress on program actions, consolidating information on expenses, contracting, and procurement, and will prepare the program financial statements. The loan proceeds will be allocated to the executing agency annual budgets, through current transfers. In addition, the executing agency will receive support from a strategic committee formed by UTEC, CEIBAL, and ANII, which has been operating successfully for the past seven years and is responsible for providing technical advice to the program execution unit, through which actions will be coordinated. The Program Operating Regulations will specify the details of the execution mechanism, makeup of the program execution unit, and the duties and participants of the strategic committee and regional program coordination national committee. The administration and finance area will be in charge of fiduciary management of the program, to include payments to the beneficiaries.
- 3.3 **Institutional coordination.** For effective execution of program activities, UTEC, through its professional team and instruments, will promote coordination between

This is deemed to be a low risk, based on experience with execution of this type of program, the stability of public policy in the country, and the probability and magnitude of the risk.

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UTEC is an autonomous entity, as per the relevant provisions of the Constitution, through the General Law on Education, its founding law, and other applicable provisions. It is part of the National Public Education System, together with the Ministry of Education and Culture, National Public Education Administration, and Universidad de la República (University of the Republic); as well as the National Public Post-Secondary Education System, with the Universidad del Trabajo (Work University) through the Professional Technical Education Bureau, the Education Training Council, and the Universidad de la República.

the various stakeholders. For program management, the executing agency will receive support from the strategic committee, whose essential mission will be to coordinate the public agencies and private sector, as well as to provide the strategic vision and ensure medium- and long-term sustainability of the agenda for developing advanced digital skills for internationalization. Component 1 will foster coordination with local and international academic institutions to define curricula, as well as with CEIBAL; Component 2 will promote coordination among academia and the productive sector, with actors like Uruguay XXI⁸⁷ and ANII. The coordination agreements with these institutions will be defined in the <u>Program Operating Regulations</u>.

- 3.4 **External verification of results.** Verification will be conducted by a specialized firm or consultants who will independently evaluate achievement of results. The verifier will be responsible for submitting a verification report to the Bank before each disbursement request. The verification has two objectives, namely: (i) to issue an opinion on the accuracy, reliability, validity, and consistency of the results data; and (ii) to determine the value of the results indicators established for each disbursement tranche. The verification firm or consultants will be experienced in project evaluation and monitoring, working with results indicators, and evaluating the reliability of the sources of information and the methods used to produce them.
- 3.5 Special contractual conditions precedent to the first disbursement of the loan proceeds. As special conditions precedent to the first disbursement of the loan proceeds, the borrower, through the executing agency, will submit evidence to the Bank of: (i) the entry into force of the Program Operating Regulations, in accordance with the terms agreed upon with the Bank; (ii) hiring of the consulting agency responsible for external verification of results in accordance with the terms agreed upon with the Bank; and (iii) establishment of the program execution unit within the structure of the Technological University of Uruguay (UTEC), hiring of the program director, and appointment of the financial management and procurement specialists. The first condition seeks to ensure that the various calls for bids will be conducted in line with the terms agreed upon with the Bank, described in detail in the Program Operating Regulations. Lastly, for verification of results, it will be crucial to request the contracting of the consulting agency responsible for external verification of results as well as the contracting or appointment of the program execution unit team in order to achieve the expected results.
- 3.6 **Special contractual conditions of execution.** Prior to the start of Component 2 activities, the borrower, through the executing agency, will submit evidence to the Bank of the entry into force of a cooperation agreement between UTEC and Uruguay XXI that establishes the responsibilities and interagency coordination mechanisms for those activities.
- 3.7 Fiduciary agreements and requirements. Annex III explains the guidelines for financial management and procurement execution that will apply to the program. Procurements made directly by UTEC will be governed by the systems and procedures set out in UTEC's policies. The UTEC procurement system was

⁸⁷ Non-State public entity (Law 16,736) whose purposes are to attract foreign investment, advise the executive branch of considerations that could improve conditions for investment and exportation, and develop and provide information and support services to existing and potential exporters and investors.

evaluated by the Bank and is considered compatible with internationally accepted principles, practices, and standards for all procurement methods, and it allows bidders from all countries to participate. Financial management will be subject to the guidelines set out in OP-273-12, as well as the Bank guidelines applicable to LBR. The operation provides for an initial disbursement of up to US\$765,056 (9.6% of the loan amount), to be discounted in the second and final year of the execution period. For program purposes, the executing agency's audited financial statements will be submitted according to the terms previously agreed upon with the Bank.

3.8 Financing of previously achieved results. Subject to independent verification, the Bank may draw on loan proceeds to finance the results achieved by UTEC between the project profile approval date (2 May 2024) and the loan eligibility date, for up to US\$311,310 (3.9% of the loan amount) in connection with disbursement indicators 1.1, 1.2, and 1.3, provided that the expenses associated with achievement of these outcomes are eligible within the project, can be attributed to fulfillment of the aforementioned development outcomes, and constitute expenditures incurred up to 12 months prior to approval of the project profile. This financing is justified by the need to reach agreements with academic partners and to structure the postgraduate and continuing education programs before the comprehensive start of the program. The combined amount of the initial disbursement and financing of previously achieved results will be less than 30% of the total loan amount, pursuant to paragraph 5.25 of the LBR guidelines (GN-2869-11).

B. Summary of arrangements for results monitoring

- 3.9 **Monitoring.** The program will be monitored by the UTEC Monitoring and Evaluation Unit, which is part of the Evaluation and Statistics Program. Every six months, UTEC will submit reports to the Bank that render account of the achievements reached in terms of the output indicators and intermediate outcomes defined in the Results Matrix and in the monitoring and evaluation plan. Likewise, the reports for the second half of each year will include an annual work plan and review of targets for the rest of the program.
- 3.10 **Evaluation.** During the course of the program, the Monitoring and Evaluation Unit will conduct an impact assessment of the incomes of graduates from postgraduate courses, according to the guidelines established in the monitoring and evaluation plan. This assessment will focus on attribution of the outcome indicators described in Annex II, through administrative records from UTEC and the other official bodies (Social Security Bank), Ministry of Labor and Social Security) described in the monitoring and evaluation plan. When the operation ends, a project completion report will be prepared describing the achievements, lessons learned, and sustainability.

C. Post-approval design activities

3.11 After the program is approved, the main design activities will focus on: (i) designing the national business demand survey (paragraph 1.27); and (ii) building partnerships with academic associates (paragraph 1.26).

Development Effec	tiveness Matrix						
Summary	UR-L1197						
I. Corporate and Country Priorities							
Section 1. IDB Group Institutional Strategy Alignment							
Operational Focus Areas	-Biodiversity, natural capital, and climate action -Gender equality and inclusion of diverse population groups -Social protection and human capital development -Productive development and innovation through the private sector -Regional integration						
[Space-Holder: Impact framework indicators]							
2. Country Development Objectives							
2. Country Development Objectives							
Country Strategy Results Matrix	GN-3056	Estrategia País con Uruguay 2021-2025 2.2 Mejorar la inserción comercial internacional					
Country Program Results Matrix	GN-3207	The intervention is included in the 2024 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		8.5					
3.1 Program Diagnosis		2.5					
3.2 Proposed Interventions or Solutions		3.2					
3.3 Results Matrix Quality 4. Ex ante Economic Analysis		2.9 9.0					
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		1.5					
4.2 Identified and Quantified Benefits and Costs		3.0					
4.3 Reasonable Assumptions		2.5					
4.4 Sensitivity Analysis		2.0					
4.5 Consistency with results matrix		0.0 8.0					
5. Monitoring and Evaluation 5.1 Monitoring Mechanisms		2.9					
5.2 Evaluation Plan		5.1					
III. Risks & Mitigation Monitoring Matrix							
Overall risks rate = magnitude of risks*likelihood		Low					
Environmental & social risk classification		C					
IV. IDB's Role - Additionality The project relies on the use of country systems							
Fiduciary (VPC/FMP Criteria	Yes	Financial Management: Budget, Treasury. Procurement: Information System, Price Comparison, Contracting Individual Consultant, National Public Bidding.					
Non-Fiduciary	,						
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:							
	Yes	ATN/OC-17134-UR					

The general objective promoting Uruguay's international insertion through the generation of skills for new technologies in knowledge-intensive goods and services (SBIC) sectors. The specific objectives are: (i) to increase the supply of human capital with advanced digital competencies demanded by SBIC; and (ii) to strengthen internationalization capabilities of SBIC companies and those that incorporate SBIC in their processes and products.

The diagnosis discusses the barriers to the internationalization of companies in the SBIC sector: (i) insufficient supply of human capital with digital skills. It is explained that there is a lack of coordination between the human capital demands of companies, the academic supply and the demand for training of students; the program aims to align them. (ii) companies, particularly in regions (outside the capital) demand few business development services (BDS); due, in part, to little knowledge about their existence; the program plans to make -at the company level- diagnoses and recommendations on which BDS are better to improve export capabilities. Evidence is presented on the effectiveness of BDS on firm performance measures, but not on the effect of BDS promotion on their use by firms.

The results matrix includes indicators that measure the achievement of specific objectives. However, details are lacking to make them all SMART. This is critical for one of the indicators, which is also linked to disbursement. For attribution analysis, the M&E plan proposes to use a before-after comparison for most of the indicators. A quasi-experimental evaluation will be done for two of them, one for each specific objective. In both cases, for outcome indicators (which measure the achievement of the respective objective among program beneficiaries). Finally, the matrix of disbursement indicators should be reviewed. The sum of the disbursement amounts of SO2 indicators does not correspond to the total of the objective. The total disbursements associated with SO1 and SO2 are different from the total costs for components 1 and 2, respectively, in the cost table in the theory of change annex.

The economic analysis consists of a cost-benefit analysis. The model assumptions are reasonable. The calculation of benefits is consistent with the indicator targets in the results matrix except for one indicator (Benefit underestimated). A sensitivity analysis was done for the critical parameters.

RESULTS MATRIX

Project objective:

The specific objectives of this operation are: (i) to increase the supply of human capital with the advanced digital skills needed in knowledge-intensive goods and services sectors; and (ii) to build capacity for international positioning at companies in the knowledge-intensive goods and services sectors and at companies that use knowledge-intensive goods and services in their processes and products. Achievement of these objectives will contribute to the general objective of promoting Uruguay's integration into global markets by developing skills for new technologies in knowledge-intensive goods and services sectors.

GENERAL DEVELOPMENT OBJECTIVE

	Indicators	Unit of measure	Baseline	Expected year of achieve-ment	Target	Means of verification	Comments
General deve	opment objective: To promote Ur	uguay's integr	ration into glo	bal markets			
Indicator 1	Exports of knowledge-intensive goods and services over total exports	Percentage	7.5	2029	8.3	Report based on balance of payments (BCU). National Institute of Statistics (INE)	Observable during the life of the project. The baseline is from 2023, when the value of knowledge-intensive goods and services exports reached US\$1.605 billion, and total exports were US\$21.286 billion. The target for 2029 was set assuming that knowledge-intensive goods and services exports will maintain their 2017-2023 annual growth rate of 5.6%, and that international marketing actions will add US\$35 million. This additional impact is based on Volpe et al. (2010), who estimates that trade promotion activities carried out between 2000 and 2018 were associated with a 15.4% increase in the value of the total exports of the beneficiary firms. Taking into account that the average exports of knowledge-intensive goods and services firms are US\$1.47 million per year, the additional effect of the international promotion activities is equivalent to US\$226,000 per company. Considering that an average of 154 knowledge-intensive goods and services companies were supported between 2008 and 2023, the total comes to US\$35 million (US\$226,000 x 154). Meanwhile, total exports are expected to grow

	Indicators	Unit of measure	Baseline	Expected year of achieve-ment	Target	Means of verification	Comments
							by 4.2% annually, according to the IMF (WEO, 2024). The target will make it possible for Uruguay to close the gap with Argentina (approximately 10%) and pull away from Chile (approximately 6% of non-mining exports).
Indicator 2	AT Kearney Global Services Location Index (GSLI) score	Points	4.53	2029	4.99	AT Kearney report	Observable at end of project. The GSLI is a biennial index that measures countries' attractiveness for the offshoring of global services. The index is based on four dimensions: financial attractiveness (weighted 35%); people skills and availability (weighted 25%); business environment (weighted 25%); and digital resonance (weighted 15%). The baseline is the GSLI score in 2023. The target was set based on the assumption that Uruguay's score will go up, bringing the country to the level of its historical gap (95%) with the average scores of Chile, Colombia, and Costa Rica. Uruguay's score had dropped moderately in 2023, to 0.87 of the average of the comparable countries.

SPECIFIC DEVELOPMENT OBJECTIVES

Indicators	Unit of measure	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Means of verification	Disburse- ment indicator (yes/no)	Comments
Specific development objective 1:	To increase the s	upply of hur	nan capita	l with the a	dvanced di	gital skills	needed in I	knowledge-inte	ensive goods and se	ervices sectors	3
Number of new students who have enrolled in programs	# of new students who have enrolled in postgraduate programs	0	30	50	80	50	0	210	Program management report	Yes	Monitoring and evaluation plan
	# of new students who have enrolled in continuing education programs	0	30	50	50	50	50	230	Program management report	Yes	Monitoring and evaluation plan
1.2 Number of students who have graduated	Number	31	20	45	45	70	65	245	Program management report	Yes	Monitoring and evaluation plan
1.3 Rate of program enrollees who are Uruguayan residents living in the regions	Percentage points	37	42	45	48	51	55	48	Program management report	No	Monitoring and evaluation plan
Percentage of UTEC professors who have been trained on climate change issues	Percentage points	0	0	60	60	60	60	60	Program management report	No	Monitoring and evaluation plan
Percentage of women who have received scholarships among all women enrolled in postgraduate programs	Percentage points	58						62	Program management report	No	Monitoring and evaluation plan
Change in income of graduates of postgraduate courses compared to the change in the average wages of private sector employees	Percentage points	0						18	BPS-MTSS administrative records	No	Monitoring and evaluation plan

Indicators	Unit of measure	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Means of verification	Disburse- ment indicator (yes/no)	Comments	
Specific development objective 2: To build capacity for international positioning at companies in the knowledge-intensive goods and services sectors and at companies that use knowledge-intensive goods and services in their processes and products												
2.1 Average increase in the export readiness score for supported export-oriented companies	Percentage points	Baseline	0					Baseline+15 percentage points	Program management report	Yes	Monitoring and evaluation plan	
2.2 Number of companies serv by the program that access new business development services for the first time	d #	0	0	2	3	5	5	15	Program management report based on ANII, ANDE, Uruguay XXI, UTEC, and INEFOP records	Yes	Monitoring and evaluation plan	
2.3 Number of companies loca in regions that have been served by the program and access new business development services	ed #	0	0	0	0	1	2	3	Program management report based on ANII, ANDE, Uruguay XXI, UTEC, and INEFOP records	No	Monitoring and evaluation plan	
2.4 Increase in the percentage companies served that become new exporters	Percentage points	0						2.6	Company diagnostic assessments	No	Monitoring and evaluation plan	

DISBURSEMENT-LINKED INDICATORS MATRIX

		_	Recognition	١	/ear 1	Y	ear 2	١	ear 3	Y	ear 4	Y	ear 5	End	of project
DLI		Base- line	of prior results Yes/No	Target	Associated amount										
	Specific development objective	1													
#1	Number of agreements in force entered into with academic partners [1] (institutional strengthening output associated with #2 and #3)	5	Yes	2	88,470	4	225,265	4	287,644	4	187,108	4	87,168	4	875,655
#2	Number of new students who have enrolled in programs (intermediate outcome)	0	Yes	60	222,840	100	658,806	130	815,887	100	647,458	50	381,542	440	2,726,533
#3	Number of students who have graduated from programs	31	No	20	295,325	45	312,465	45	494,887	70	488,000	65	259,714	245	1,850,391
	Total for SDO 1				606,635		1,196,536		1,598,418		1,322,566		728,424		5,452,579
	Specific development objective	2													
#4	Average increase in the export readiness score for supported export-oriented companies	0	No	0	0	0	0	0	0	0	0	15	225,548	15	225,548
#5	Number of companies served by the program that access new business development services for the first time	0	No	0	0	2	155,774	3	175,576	5	329,284	5	320,361	15	980,955
#6	Business and student pathway information platform operating, with the classifications of persons with disabilities, LGBTIQ+, Afro-descendants, Indigenous peoples [2] (institutional strengthening output)	0	No	1	469,731	1	279,438	1	363,907	1	167,547	1	60,255	1	1,340,878
	Total for SDO 2				469,731		435,212		539,483		496,831		606,164		2,547,421
	Total				1,076,366		1,631,748		2,137,901		1,819,397		1,334,588		8 million

[1] and [2]: Institutional strengthening indicators.

PROTOCOL FOR VERIFYING DISBURSEMENT INDICATORS

DLI	Definition/estimation methodology	Means of verification	Verifying agency	Verification protocol
Indicator #1	Number of agreements with academic partners in force	Agreements signed	Independent verifier	Through the agreements or conventions signed that are in force at the time of verification.
Indicator #2	Number of new students who have enrolled in programs	UTEC student management report	Independent verifier	Through verification in the student management system.
Indicator #3	Number of students who have graduated	UTEC student management report	Independent verifier	Through verification in the student management system.
Indicator #4	Average increase in the export readiness score for supported export-oriented countries	Approved document	Independent verifier	Company management system. Monitoring and evaluation plan.
Indicator #5	Number of companies served by the program that access new business development services for the first time	Business development services approval document	Independent verifier	Through verification in the company management system. Monitoring and evaluation plan.
Indicator #6	Business and student pathway information platform operating, with classifications for persons with disabilities and LGBTIQ+, Afro-descendant, and Indigenous persons	Technological platform implemented	Independent verifier	Through verification of the operation of a customer relationship management system being used by UTEC. Monitoring and evaluation plan.

Country: Uruguay Division: TIN Operation No.: UR-L1197 Year: 2024

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Executing agency: Universidad Tecnológica de Uruguay (Technological University of Uruguay,

UTEC)

Operation name: Uruguay Global II: Promoting Advanced Digital Skills for Internationalization

I. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

1. Use of country systems in the operation

	• Reports	♦ Information systems	National competitive bidding (NCB)
♦ Treasury		♦ Shopping	
	External control	♦ Individual consultants	

2. Fiduciary execution mechanism

		Loan based on results (LBR), the second LBR for the executing agency.
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3. Fiduciary capacity

Fiduciary capacity of the executing agency	The fiduciary agreements and requirements for this operation are based on UTEC's track record as the executing agency for LBR 4658/OC-UR. An institutional capacity assessment of UTEC is still available, and it concludes that the entity's fiduciary management capacity (procurement and financial management) is sufficient for the operation, and can be strengthened during program execution on the basis of the (i) Program Operating Regulations within the framework of GN-2869-10 and Bank guidelines; and (ii) level of coordination between UTEC and the Ministry of Economy and Finance (MEF) for approval of the required budget allocation and procedures. In addition, as required for an LBR, fiduciary evaluations were conducted, and the results show that UTEC has sufficiently well developed fiduciary evertoms in place to achieve the expected
	well-developed fiduciary systems in place to achieve the expected results under the LBR with a low level of fiduciary risk.

4. Fiduciary risks and risk response

Risk classification	Risk	Level of risk	Risk response
Planning	If UTEC reduces its level of coordination with the MEF, processing times for the budget allocation and approval could affect the timely availability of funds for achievement of the expected results.	Low	UTEC will manage the budgetary allocation for the program with the MEF in line with the Five-Year Budget Law for 2025-2029. It will also arrange any potential support needed during loan execution in a timely manner.

- 5. Policies and guidelines applicable to the operation: Since UTEC's procurement system was positively reviewed, it is recommended for use to execute this operation under the LBR modality, as per GN-2869-1. This waiver of the use of the Bank procurement policy does not apply to the contracting of the individual expert, organization, or firm that will independently verify attainment of results, if contracted by the executing agency. Financial Management Guidelines for IDB-financed Projects (OP-273-12), applicable to LBR.
- 6. Exceptions to policies and guidelines: Pursuant to document GN-2869-1, paragraphs 5.33 and 5.34, the Board of Executive Directors approved a waiver to the use of the Bank procurement policies, as well as to the provisions on the origin of goods and the nationality of the firms and individuals associated with an IDB member country. According to the LBR Guidelines, the Board of Executive Directors' approval does not need to be requested for each operation.

II. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE LOAN CONTRACT

Exchange rate: For the purposes of Article 4.10 of the General Conditions, the parties agree that the applicable exchange rate will be the one indicated in section (b)(ii) thereof. The agreed-upon exchange rate will be the exchange rate on the effective date on which the borrower, the executing agency, or any other person or legal entity with delegated authority to incur expenditures, makes the respective payments to the contractor, vendor, or beneficiary.

Type of audit: The executing agency's audited financial statements will be submitted within the 120 days following the close of each executing agency fiscal year and will be duly audited by an independent audit firm acceptable to the Bank. The final audited financial statement will be submitted within the 120 days following the date of the last disbursement or any extensions thereto.

III. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

•	Bidding documents	The bidding documents to be used will be the ones that UTEC already uses for the procurement of works, goods, and services, whose contents are sufficient and appropriate. These documents should include measures on the appropriate use of funds, as well as on applying the rules of economy and efficiency.
•	Use of country systems	In light of the Board of Executive Directors' approval of the waiver of use of the IDB procurement policy for execution of an LBR (GN-2869-1, paragraph 5.34), the fiduciary systems used for procurement by the executing agency were evaluated to ensure that the loan proceeds would be used to achieve the outcomes that correspond to the planned objectives, guided by principles of transparency, economy, efficacy, and efficiency. The evaluation showed these systems to be trustworthy and consistent with the principles of good practices, and therefore its use is recommended for program procurement.
•	Financing of previously achieved results	Subject to independent verification, the Bank may draw on loan proceeds to finance the results achieved by UTEC between the project profile approval date (2 May 2024) and the loan eligibility date, for up to US\$311,310 (3.9% of the loan amount) in connection with disbursement indicators 1.1, 1.2, and 1.3, provided that the expenses associated with achievement of these outcomes are eligible within the project, can be attributed to fulfillment of the aforementioned development outcomes, and constitute expenditures incurred up to 12 months prior to approval of the project profile. This financing is justified by the need to reach agreements with academic partners and to structure the postgraduate and continuing education programs before the comprehensive start of the program.
•	Special procurement provisions applicable to the operation	If the executing agency takes responsibility for contracting the independent verification agency, whether a private firm or public agency with the capacity and mandate to carry out such assessments, the selection procedures will be the ones established in GN-2350-15.
•	Procurement supervision	If the executing agency takes responsibility for contracting the independent consultant/agency that will verify that results achieved, the Bank will supervise the selection process ex ante. All other procurement and contracting processes will be carried out according to the executing agency's procurement and contracting system, for which reason they will not be supervised.
•	Records and files	UTEC will be responsible for keeping the original procurement, contracting, and financial management records on file during program execution.

IV. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

•	Programming and budget	UTEC receives an annual budget allocation from the MEF under the Five-Year Budget Law. Any potential budgetary support must be brought before the MEF and approved thereby. UTEC handles budget allocation and execution through the integrated financial management information system (country system, SIIF), complementing it with use of the enterprise resource planning budget module, Odoo. Once the MEF allocates the budgetary funds, UTEC will open a cost center for the project in Odoo.
•	Treasury and disbursement management	For cash flow management, the operation will use a national single account, for which the National Treasury will open a special account at the Central Bank of Uruguay (BCU) on behalf of UTEC for receipt of the Bank funds. Transfer of funds to accounts at other entities is not anticipated under this operation. The United States dollar will be used as the currency for the operation, at the exchange rate identified in Section II. Disbursement requests will be sent via the current Bank platform. An initial disbursement (of 9.6% of the loan amount) is planned, to be discounted in the second and final year of the execution period, as is financing of the previously achieved results (3.9% of the loan amount). The estimated flow of the up to US\$8 million in funds over the life of the program is as follows: Year 1: US\$1,076,366; Year 2: US\$1,631,749; Year 3: US\$2,137,899;
•	Accounting, information systems, and reporting	Year 4: US\$1,819,397; and Year 5: US\$1,335,590. UTEC accounting is managed as a module in the multicurrency system Odoo, which complements the SIIF. UTEC follows the International Public Sector Accounting Standards under Ordinance 89 of the Office of the Auditor General. Codification of the chart of accounts is associated with the budget categories and the projects defined in the budget execution system, in such a way that whenever an accounting entry affects the available funds, it will have a corresponding effect on execution of the respective budget. UTEC will establish subsidiary ledgers associated with the use of the Bank-provided funds. Accordingly, its institutional financial statements will include financial information related to execution of the operation. The Program Operating Regulations, with their documented definition of workflows and internal controls, will supplement the applicable policies and guidelines.
•	Internal control and internal audit	UTEC has an internal audit advisory unit, which is supported by third-party services for certain tasks. UTEC's internal audit unit performs a cross-check with the internal audit unit of the Technological Laboratory of Uruguay to validate the procedures; and reports legally to the National Internal Audit Office through the Office's institutional platform, following the applicable local procedure. The Program Operating Regulations will set out the applicable financial management framework pursuant to Bank guidelines and instructions, which will be supplemented by the financial processes that govern UTEC as per the applicable local regulations.

•	External control and financial reports	UTEC is subject to an annual financial audit, to be conducted by an independent audit firm, contracted through a competitive process. For purposes of this program, it is agreed that UTEC's audited financial statements (from the entity) will be sufficient for compliance with the contract with the Bank, in the understanding that: (i) the audit firm is Bank-eligible; (ii) the International Standards on Auditing apply; and (iii) the terms of reference include considerations agreed upon with the Bank regarding incorporating information on use of the proceeds of the Bank loan in UTEC's audited financial statements. The cutoff dates and submission deadline are set out in Section II. The program audit may also be performed by the Office of the Auditor General.
•	Financial supervision of the operation	The financial supervision plan may be adjusted based on program execution and the external audit reports. The following activities are planned: monitoring of program progress, review of disbursement requests, and visits to UTEC (in-person or virtual).

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE- /24

Uruguay. Loan ____/OC-UR to the Eastern Republic of Uruguay
Uruguay Global II: Promoting Advanced Digital
Skills for Internationalization

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 Eastern Republic of Uruguay, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the Uruguay Global II: Promoting Advanced Digital Skills for Internationalization. Such financing will be for the amount of up to US\$8.000.000, 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 2024)

LEG/SGO/CSC/EZIDB0000366-1028536987-13164 UR-L1197