

MARIANNE FAY
Directora
Bolivia, Chile, Ecuador y Perú

12 de mayo de 2022
064-2022-BM-PE

Señora
Guadalupe Pizarro
Directora General (e)
Dirección General de Tesoro Público
Ministerio de Economía y Finanzas
Jr. Junín 319, Cercado

Estimada señora Pizarro:

Ref.: Contrato de Préstamo No. 9334-PE
(Strengthening Peru's National Science, Technology and Innovation System Project
Mejoramiento y Ampliación de los Servicios de CTI Para Fortalecer el Sistema Nacional
de Ciencia, Tecnología e Innovación)

Por medio de la presente me es grato saludarla y hacerle llegar dos originales de los documentos correspondientes al Contrato de Préstamo No. 9334-PE, debidamente firmados en representación del Banco Internacional de Reconstrucción y Fomento:

- Contrato de Préstamo
- Carta de Desembolsos
- Condiciones Generales (fecha diciembre 14, 2018 (revisadas en agosto 1, 2020, diciembre 21, 2020, abril 1, 2021, y enero 1, 2022)
- Guías anti-corrupción (fecha octubre 15, 2006 y revisadas en enero 2011 y julio 1, 2016)
- Procurement Regulations (noviembre 2020)

Quisiéramos mencionar que en el Decreto Supremo No. 054-2022-EF se hace mención a la tasa Libor. No obstante, considerar que para esta operación y las siguientes, esta tasa ya no es la de referencia desde 13 de diciembre de 2021, sino la SOFR (por sus siglas en inglés), como lo establecen las condiciones generales y como se incluyó en las minutas de negociación.



Apreciaría se sirva gestionar la firma en representación de la República del Perú, luego de lo cual, agradeceríamos la devolución de uno de los originales al Banco Mundial.

Sin otro particular, hago propicia la ocasión para reiterarle mi especial consideración.

Atentamente,



Bjorn Philipp
Acting Country Director
Bolivia, Chile, Ecuador y Perú

Adjunto: lo indicado.



LOAN NUMBER 9334-PE

Loan Agreement

**(Strengthening Peru's National Science, Technology and Innovation System Project
*Mejoramiento y Ampliación de los Servicios de CTI Para Fortalecer el Sistema Nacional de
Ciencia, Tecnología e Innovación*)**

between

REPUBLIC OF PERU

and

**INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT**

LOAN AGREEMENT

AGREEMENT dated as of the Signature Date between the REPUBLIC OF PERU (“Borrower”) and the INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (“Bank”). The Borrower and the Bank hereby agree as follows:

ARTICLE I — GENERAL CONDITIONS; DEFINITIONS

- 1.01. The General Conditions (as defined in the Appendix to this Agreement) apply to and form part of this Agreement.
- 1.02. Unless the context requires otherwise, the capitalized terms used in this Agreement have the meanings ascribed to them in the General Conditions or in the Appendix to this Agreement.

ARTICLE II — LOAN

- 2.01. The Bank agrees to lend to the Borrower the amount of one hundred million Dollars, (\$100,000,000), as such amount may be converted from time to time through a Currency Conversion (“Loan”), to assist in financing the project described in Schedule 1 to this Agreement (“Project”).
- 2.02. The Borrower may withdraw the proceeds of the Loan in accordance with Section III of Schedule 2 to this Agreement. The Borrower’s Representative for purposes of taking any action required or permitted to be taken pursuant to this Section is the Borrower’s Minister of Economy and Finance or the Borrower’s General Director of the DGTP, or any person whom any of them shall designate in writing.
- 2.03. The Front-end Fee is one quarter of one percent (0.25%) of the Loan amount.
- 2.04. The Commitment Charge is one quarter of one percent (0.25%) per annum on the Unwithdrawn Loan Balance.
- 2.05. The interest rate is the Reference Rate plus the Variable Spread¹ or such rate as may apply following a Conversion; subject to Section 3.02(e) of the General Conditions.
- 2.06. The Payment Dates are June 15 and December 15 in each year.
- 2.07. The principal amount of the Loan shall be repaid in accordance with Schedule 3 to this Agreement.

¹ Only Variable Spread is available due to FSL suspension effective April 1, 2021.

ARTICLE III — PROJECT

- 3.01. The Borrower declares its commitment to the objectives of the Project. To this end, the Borrower shall ensure that the Project is carried out by PROCENCIA with the technical support of CONCYTEC in accordance with the provisions of Article V of the General Conditions and Schedule 2 to this Agreement.

ARTICLE IV — EFFECTIVENESS; TERMINATION

- 4.01. The Additional Conditions of Effectiveness consist of the following:
- (a) the Project Operational Manual has been prepared by the Borrower through PROCENCIA in coordination with CONCYTEC and adopted by the Borrower through PROCENCIA, in form and substance satisfactory to the Bank;
 - (b) the Borrower through PROCENCIA has prepared, adopted and publicly disclosed on its website the Labor Management Procedures in form and substance acceptable to the Bank;
 - (c) the Borrower through PROCENCIA has prepared, adopted and publicly disclosed on its website the grievance mechanisms referred to in the ESCP in form and substance acceptable to the Bank; and
 - (d) the Borrower has provided evidence satisfactory to the Bank that PROCENCIA has initiated operations in accordance with the fifth final supplementary provision of Supreme Decree No. 051-2021-PCM creating PROCENCIA (*i.e.*, that the FONDECYT-PROCENCIA merger process has concluded) and has perfected the merger process by finalizing its budget and ability to make payments.
- 4.02. The Effectiveness Deadline is the date ninety (90) days after the Signature Date.

ARTICLE V — REPRESENTATIVE; ADDRESSES

- 5.01. The Borrower's Representative is its Minister of Economy and Finance, provided that the General Director of the DGTP may, by himself or herself represent the Borrower to sign amendments and/or notices to this Agreement.
- 5.02. For purposes of Section 10.01 of the General Conditions: (a) the Borrower's address is:

Ministry of Economy and Finance
Jr. Junín 319
Lima, Peru

(b) the Borrower's Electronic Address is:

Facsimile: +51 (1) 626-9921
E-mail: vhacienda@mef.gob.pe

5.03. For purposes of Section 10.01 of the General Conditions: (a) the Bank's address is:

International Bank for Reconstruction and Development
1818 H Street, N.W.
Washington, D.C. 20433
United States of America; and

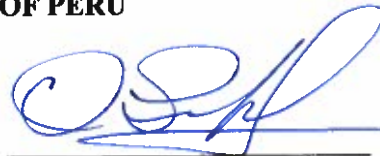
(b) the Bank's Electronic Address is:

Facsimile:
1-202-477-6391

AGREED as of the Signature Date.

REPUBLIC OF PERU

By



Authorized Representative

Name: OSCAR M. GRAHAM YAMAUCHI

Title: MINISTRO DE ECONOMIA Y FINANZAS

Date: 18 DE MAYO, 2022

**INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT**

By



Authorized Representative

Name: BJORN PHILIPP

Title: ACTING COUNTRY DIRECTOR

Date: MAY 12, 2022

SCHEDULE 1

Project Description

The objective of the Project is to improve science, technology, and innovation services in targeted Strategic Areas and regions.

The Project consists of the following parts:

Part 1: Strengthening SINACTI's institutions and governance to bolster innovation in Peru

- 1.1. **Supporting the reform of SINACTI's institutions and modernizing CONCYTEC's capacities, services and policymaking mechanisms**
 - 1.1.1. **Strengthening CONCYTEC's institutional capacity**, including through: (a) strengthening CONCYTEC's and PROCENCIA's end-to-end digitalization and modernization of information and knowledge management systems and client services; (b) development of an integrated digital platform across SINACTI institutions; (c) preparation of analytical studies and position papers on key innovation policy reforms and topics; and (d) Training and capacity-building to improve management and policy evaluation.
 - 1.1.2. **Enhance the quality standards for STI-focused PhD programs in Peruvian universities** through, in coordination with SINEACE and SUNEDU, (a) designing a set of quality standards and indicators, (b) internationally benchmarking PhD programs, and (c) developing a STI PhD accreditation work plan and proposal of regulatory arrangements.
 - 1.1.3. **Develop a national STI evaluation system to inform decision making on innovation policy and public expenditures**, through the development of indicators, surveys and data services, including *inter alia*: (a) the census of research and development in research centers; (b) a national survey of public perception of STI; (c) national surveys of research and development and technology adoption in companies; (d) a survey in STI activities; and (e) a survey of scientific equipment in research centers.
 - 1.1.4. **Evaluate the scope, performance, and institutional arrangements of leading PRIs in Peru**, by defining management standards and systems for PRIs and conducting diagnostics of PRIs, including through the development of roadmaps for institutional improvement with a view to boosting their contribution to innovation and technology transfer in Strategic Areas.
 - 1.1.5. **Support the formation and consolidation of specialized research networks in Strategic Areas**, through the provision of Research Network Grants to Peruvian universities, PRIs and/or CITEs, the proceeds of which will finance Eligible Grant Expenditures to strengthen academic collaboration or joint output by research networks proposed by the respective institutions.
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- 1.2. **Equal access to research in STI areas.** Fostering equal access to STI research in all regions of Peru through: (a) providing an initial two-year subscription to full-text information resources to which all students, teachers, and researchers from universities and PRIs in Peru would have free access; and (b) designing a network operating model for contracting such information resources that is financially sustainable beyond the initial two-year subscription period and guarantees the universal free access mentioned in paragraph (a) above.

Part 2: Capacity development for the generation of knowledge in Strategic Areas

- 2.1. **Institutional Alliances for strengthening research, science, and technology capacity.**
 - 2.1.1. **Support Institutional Alliances for strengthening doctoral programs in Strategic Areas.** Creating or strengthening doctoral programs in the Strategic Areas at Peruvian universities by supporting up to eight competitively selected institutional alliances formed to support such doctoral programs, each consisting of a lead Public University and one or more other Peruvian universities (with alliances including a university outside the metropolitan area of Lima being encouraged), well-recognized international universities, private firms, business associations, and/or social organizations relevant to the supported doctoral programs (each, an “Institutional Alliance”), with Institutional Alliance Grants to Public Universities, the proceeds of which will finance Eligible Grant Expenditures consisting of the following: (a) consultancies to create work plans, roadmaps, curriculum designs and other activities needed to obtain licenses by SUNEDU for the supported doctoral programs; (b) expenses associated with the promotion of the doctoral program; (c) teaching and research under the relevant doctoral program; (d) short- and long-term research stays and related travel by visiting researchers with doctoral degrees both to and from Peru to improve research capabilities of the Peruvian universities associated with the doctoral programs supported by the Institutional Alliance; (e) minor equipment inputs needed to conduct research; (g) administrative and logistical management of the Institutional Alliance; and (h) enrollment fees and tuition for Eligible Students who have received Scholarships under Part 2.1.2 of the Project to study under such doctoral programs.
 - 2.1.2. **Finance Scholarships for doctoral students at supported doctoral programs.** Provide Scholarships to Eligible Students selected on a competitive basis to pursue doctoral studies in the Strategic Areas at universities that are part of an Institutional Alliance supported by Part 2.1.1 of the Project.
- 2.2. **Support for knowledge generation in strategic areas.**
 - 2.2.1. **Strengthen laboratories.** Provide Laboratory Strengthening Grants on a competitive basis to Public Universities, PRIs, public CITEs, and/or INACAL, the proceeds of which will finance Eligible Grant Expenditures consisting of equipment purchases and upgrades for their research laboratories and Training of technical and managerial staff of such laboratories to improve the recipients’ capacity to carry out quality research in the Strategic Areas.

2.2.2. Finance research grants. Providing the following types of grants:

- (a) Competitively awarded Type 1 Research Grants to Peruvian universities or PRIs, the proceeds of which will finance Eligible Grant Expenditures to support research and innovation projects proposed by partnerships among one or more public or private Peruvian universities licensed by SUNEDU, PRIs and/or CITEs that advance basic knowledge that may have applications in Strategic Areas but whose results may not be transferable in the immediate term; and
- (b) Competitively awarded Type 2 Research Grants to Peruvian universities or PRIs, the proceeds of which will finance Eligible Grant Expenditures to support doctoral research projects in Strategic Areas.

Part 3: Strengthening Industry-academia linkages to accelerate technology transfer and science-based business innovation

3.1. Align demand and supply of R&D and promote industry-academia linkages.

3.1.1. Conduct Competitiveness Reinforcement Initiatives for Productive Innovation. Provision of technical assistance for implementing value-chain level CRIs for PI in different regions of the Borrower's territory with a focus primarily on the Strategic Areas, each of which will: (i) identify the challenges firms face in targeted value chains and clusters in reaching higher value-add and climate-friendly market segments; (ii) define a strategy to address these challenges; and (iii) prepare a detailed innovation upgrading plan to be prepared jointly by participating firms and universities, and support institutions with market and value chains development experts.

3.1.2. Build institutional capacity to facilitate technology transfer for the Strategic Areas through the following activities: (a) evaluation of existing institutional policies in supported universities and research centers for protection of intellectual property and technology transfer models; (b) providing five competitively selected Peruvian technology transfer offices (including two outside of Lima) with capacity building and operational funding support; (c) early identification and commercialization mapping of scientific and technical knowledge and research with commercial potential; and (d) technical assistance to reinforce the capacity of CONCYTEC to provide assistance to Peru's universities and PRIs that are aiming to adopt best practices for connecting researchers to markets.

3.2. Scaling-up technology development and innovation-based entrepreneurship

3.2.1. Development of technologies to support value chains

- (a) **Grants for Industry-Academia contract research.** Providing competitively awarded Contract Research Grants to Peruvian universities, PRIs, and/or CITEs, the proceeds of which will finance Eligible Grant Expenditures of demand-driven contract research projects relevant primarily to the Strategic Areas (including but not limited to projects
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identified through CRIs for PI under Part 3.1.1) to be carried out by the relevant Eligible Grantees for, or jointly with, one or more co-sponsoring Eligible Private Sector Firms.

- (b) **Laboratory accreditation.** Providing competitively awarded Laboratory Accreditation Grants to Peruvian universities, PRIs, CITEs and/or other STI Institutions, the proceeds of which will finance Eligible Grant Expenditures to support the accreditation of laboratories of the relevant Eligible Grantees to provide internationally recognized calibration and testing services to Peruvian firms to evaluate the conformity of their products with national or international standards (“Laboratory Product Testing Services”).
- (c) **Laboratory testing for certification of products and services in targeted value chains.** Providing competitively awarded Laboratory Product Testing Grants to Peruvian universities, PRIs, CITEs and/or other STI Institutions with laboratories (which may include those supported under Part 3.2.1(b) of the Project) accredited to provide Laboratory Product Testing Services, the proceeds of which will finance Eligible Grant Expenditures of laboratory tests for the certification of new products and services identified primarily through the CRIs for PI to show their conformity with market quality standards.

3.2.2. **Academic entrepreneurship grants.** Provide competitively awarded Academic Entrepreneurship Grants to Peruvian universities, PRIs and/or CITEs, the proceeds of which will finance Eligible Grant Expenditures of science-based research and development projects relevant primarily to the Strategic Areas that are at advanced stages of technology readiness, to be awarded in either of two phases depending on the readiness of the project: (a) a phase one grant, focusing on proving the relevant technology and estimating likely demand, and (b) a phase two grant, to support projects that received phase one grants and demonstrate strong commercial potential towards reaching investment readiness.

Part 4: Project Management and Monitoring & Evaluation

Strengthening the institutional and organizational capacity of PROCENCIA, required for the successful implementation of Project-supported activities, including compliance with technical, procurement, environmental and social, financial management, and monitoring and evaluation requirements (including Impact Evaluations), and reinforcing climate mitigation and adaptation measures during the implementation of Project activities and support monitoring and evaluation of climate-related indicators.

SCHEDULE 2

Project Execution

Section I. Implementation Arrangements

A. Institutional Arrangements

1. **Project Implementation Team:** The Borrower shall ensure that PROCENCIA with technical support from CONCYTEC, shall:
 - (a) maintain, until the completion of the Project, a team (the "PIT") responsible for the management, coordination, supervision, monitoring and evaluation of the Project, including with respect to all procurement, financial management, environmental and social requirements related to the Project; and
 - (b) no later than thirty (30) days after the Effective Date, hire (to the extent such staff are not already in place), and thereafter maintain, key staff in the PIT with functions, experience, responsibilities and qualifications acceptable to the Bank, as described in the POM, including, *inter alia*, a Project coordinator, an adjunct Project coordinator, at least three technical experts, two procurement specialists, one financial management specialist, one budget and planning specialist, one legal specialist, and one socio-environmental specialist, to support the implementation of the Project.

B. Sub-Projects

1. The Borrower, through PROCENCIA, shall issue calls for proposals, competitively select proposals and grantees, and make Grants to Eligible Grantees for the implementation of Sub-Projects in accordance with the eligibility, selection, and technical criteria and procedures acceptable to the Bank set forth in the POM (including the applicable Specific Operational Manual(s)) and with the applicable requirements of the ESMF.
 2. After having selected and approved a proposal for a Sub-Project presented by an Eligible Grantee in accordance with the POM, and for the purpose of carrying out such Sub-Project, the Borrower through PROCENCIA shall enter into an agreement with the relevant Eligible Grantee ("Grant Agreement"), to be prepared based on the relevant model form (and otherwise on terms and conditions) approved by the Bank and included in the POM.
 3. The Borrower, through PROCENCIA, shall ensure that each Grant Agreement includes, *inter alia*, the following provisions:
 - (a) the Borrower, through PROCENCIA, shall obtain rights adequate to protect its interests and those of the Bank;
 - (b) the provisions required to be included pursuant to the ESCP in relation to the applicable Sub-Project, in accordance with the ESMF and LMP, including, *inter alia*, the requirement to prepare and implement any required ESMPs during the
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implementation of the Sub-Project, and to obtain any necessary environmental, social, health and safety permits, licenses and authorizations; and

(c) in the case of an Institutional Alliance Sub-Project, with respect to any Scholarship for study at a doctoral program supported by the respective Institutional Alliance Grant, the obligation of the Eligible Public University that is party to such Grant Agreement to use proceeds of the relevant Institutional Alliance Grant paid to it by PROCENCIA to satisfy the enrollment fees and tuition for such Scholarship.

4. The Borrower, through PROCENCIA, shall exercise its rights and carry out its obligations under each Grant Agreement in such manner as to protect the interests of the Borrower, through PROCENCIA, and the Bank and to accomplish the purposes of the Project.
5. Except as the Bank shall otherwise agree, the Borrower shall ensure that PROCENCIA shall not assign, amend, abrogate, waive, terminate or fail to enforce any Grant Agreement or any of its provisions.

C. Scholarships

1. The Borrower, through PROCENCIA, shall issue calls for applications from, competitively select, and award scholarships to, Eligible Students in accordance with the eligibility, selection, and technical criteria and procedures acceptable to the Bank, set forth in the POM (including the applicable Specific Operational Manual) and with the applicable requirements of the ESMF.
2. Upon the approval of a Scholarship under Part 2.1.2 of the Project, the Borrower through PROCENCIA shall enter into an agreement with the relevant Eligible Student (a "Student Agreement"), to be prepared based on the relevant model form (and otherwise on terms and conditions) approved by the Bank and included in the POM.
3. The Borrower through PROCENCIA:
 - (a) shall exercise its rights and carry out its obligations under each Student Agreement, in such a manner as to protect the interests of the Bank and the Borrower, through PROCENCIA, and to accomplish the purposes of the Loan; and
 - (b) except as the Bank shall otherwise agree, shall not assign, amend, abrogate, terminate, waive or fail to enforce any Scholarship Agreement or Student Agreement (or any provision thereof).

D. Project Operational Manual and Specific Operational Manual

1. The Borrower through PROCENCIA shall carry out the Project in accordance with the POM.
2. Except as the Bank shall otherwise agree, the Borrower through PROCENCIA shall not amend or waive the POM, or any provision thereof, or permit any such provision to be amended or waived.

3. In case of any conflict between the provisions of the POM and the provisions of this Agreement, the provisions of this Agreement shall prevail.
4. Before issuing any call for proposals or applications for a Sub-Project, Scholarship, or other Project activity subject to competitive selection, the Borrower through PROCENCIA shall co-prepare with CONCYTEC, adopt, and incorporate in the POM a Specific Operational Manual including the procedures for that Sub-Project, Scholarship or other Project activity, in form and substance satisfactory to the Bank.

E. Environmental and Social Standards

1. The Borrower shall, and shall cause PROCENCIA to, ensure that the Project is carried out in accordance with the Environmental and Social Standards, in a manner acceptable to the Bank.
2. Without limitation upon paragraph 1 above, the Borrower shall, and shall cause PROCENCIA to, ensure that the Project is implemented in accordance with the Environmental and Social Commitment Plan ("ESCP"), in a manner acceptable to the Bank. To this end, the Borrower shall, and shall cause PROCENCIA to, ensure that:
 - (a) the measures and actions specified in the ESCP are implemented with due diligence and efficiency, as provided in the ESCP;
 - (b) sufficient funds are available to cover the costs of implementing the ESCP;
 - (c) policies and procedures are maintained, and qualified and experienced staff in adequate numbers are retained to implement the ESCP, as provided in the ESCP; and
 - (d) the ESCP, or any provision thereof, is not amended, repealed, suspended or waived, except as the Bank shall otherwise agree in writing, as specified in the ESCP, and ensure that the revised ESCP is disclosed promptly thereafter.
3. In case of any inconsistencies between the ESCP and the provisions of this Agreement, the provisions of this Agreement shall prevail.
4. The Borrower shall, and shall cause PROCENCIA to, ensure that:
 - (a) all measures necessary are taken to collect, compile, and furnish to the Bank through regular reports, with the frequency specified in the ESCP, and promptly in a separate report or reports, if so requested by the Bank, information on the status of compliance with the ESCP and the environmental and social instruments referred to therein, all such reports in form and substance acceptable to the Bank, setting out, *inter alia*: (i) the status of implementation of the ESCP; (ii) conditions, if any, which interfere or threaten to interfere with the implementation of the ESCP; and (iii) corrective and preventive measures taken or required to be taken to address such conditions; and
 - (b) the Bank is promptly notified of any incident or accident related to or having an impact on the Project which has, or is likely to have, a significant adverse effect

on the environment, the affected communities, the public or workers, in accordance with the ESCP, the environmental and social instruments referenced therein and the Environmental and Social Standards.

5. The Borrower shall, and shall cause PROCENCIA to, establish, publicize, maintain and operate an accessible grievance mechanism, to receive and facilitate resolution of concerns and grievances of Project-affected people, and take all measures necessary and appropriate to resolve, or facilitate the resolution of, such concerns and grievances, in a manner acceptable to the Bank.

Section II. Project Monitoring Reporting and Evaluation

A. Project Reports

The Borrower, through PROCENCIA, shall furnish to the Bank each Project Report not later than one month after the end of each calendar semester, covering the calendar semester. Each such Project Report shall be prepared in accordance with the provisions of Section 5.08 of the General Conditions and on the basis of indicators acceptable to the Bank and set forth in the POM.

B. Financial Management, Financial Reports and Audits

Without limitation upon the Borrower's obligations under Section 5.09 of the General Conditions, before submission to the Bank of the first interim unaudited financial reports for the Project, the Borrower through PROCENCIA shall develop, and thereafter maintain, an interface among the *Sistema Integrado de Administración Financiera* and its general chart of accounts, the *Sistema Integrado de Gestión* for the monitoring of subprojects, and the *Módulo de Ejecución de Proyectos* for issuing the financial statements.

Section III. Withdrawal of Loan Proceeds

A. General

Without limitation upon the provisions of Article II of the General Conditions and in accordance with the Disbursement and Financial Information Letter, the Borrower may withdraw the proceeds of the Loan to finance Eligible Expenditures in the amount allocated and, if applicable, up to the percentage set forth against each Category of the following table:

Category	Amount of the Loan Allocated (expressed in USD)	Percentage of Expenditures to be financed (inclusive of Taxes)
(1) Grants under Parts 1.1.5, 2.1.1, 2.2.1, 2.2.2, and 3.2	60,868,260	100%
(2) Scholarships under Part 2.1.2	20,253,600	100%

(3) Goods, non-consulting services, consulting services (including audits), Operating Costs, and Training under Parts 1, 2, 3 and 4 (but excluding Grants and Scholarships)	18,878,140	100%
TOTAL AMOUNT	100,000,000	

B. Withdrawal Conditions; Withdrawal Period.

1. Notwithstanding the provisions of Part A above, no withdrawal shall be made for payments made prior to the Signature Date, except that withdrawals under Category 3 of up to an aggregate amount not to exceed \$20,000,000 may be made for payments made prior to this date but on or after May 19, 2021 (but in no case more than one year prior to the Signature Date), for Eligible Expenditures.
2. The Closing Date is December 30, 2027.

Section IV. Other Undertakings

A. Commitment to Climate Strategic Area

The Borrower, through PROCENCIA, shall ensure that at least fifty percent (50%) of all Loan proceeds under Parts 2 and 3 of the Project are applied to activities in the Climate Strategic Area.

SCHEDULE 3

Commitment-Linked Amortization Repayment Schedule

The following table sets forth the Principal Payment Dates of the Loan and the percentage of the total principal amount of the Loan payable on each Principal Payment Date (“Installment Share”).

Level Principal Repayments

Principal Payment Date	Installment Share
On each June 15 and December 15 Beginning June 15, 2027 through December 15, 2033	6.67%
On June 15, 2034	6.62%

APPENDIX

Definitions

1. “Academic Entrepreneurship Grant” means any grant made or to be made out of the proceeds of the Loan under Part 3.2.2 of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures under an Academic Entrepreneurship Sub-Project.
2. “Academic Entrepreneurship Sub-Project” means, with respect to an Academic Entrepreneurship Grant, the activities of the type described in Part 3.2.2 of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.
3. “Anti-Corruption Guidelines” means, for purposes of paragraph 6 of the Appendix to the General Conditions, the “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants”, dated October 15, 2006 and revised in January 2011 and as of July 1, 2016.
4. “Category” means a category set forth in the table in Section III.A of Schedule 2 to this Agreement.
5. “CITEs” means *Centros de Innovación Productiva y Transferencia Tecnológica* (Productive Innovation and Technology Transfer Centers), created by Legislative Decree N° 1228 dated September 24, 2015.
6. “Climate Strategic Area” means the Strategic Area described in limb (a) of the definition of that term.
7. “CONCYTEC” means *Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica*, the Borrower’s National Council for Science, Technology, and Technological Innovation, a specialized technical entity assigned to PCM, created and operating under the Borrower’s Law No. 28303 dated July 27, 2004, as modified by Law No. 30806 dated July 5, 2018, or any successor thereto acceptable to the Bank, which is responsible for the design of all financial instruments under the Project, while PROCENCIA is responsible for their execution.
8. “Contract Research Grant” means any grant made or to be made out of the proceeds of the Loan under Part 3.2.1(a) of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures under a Contract Research Grant Sub-Project.
9. “Contract Research Sub-Project” means, with respect to a Contract Research Grant, the activities of the type described in Part 3.2.1(a) of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.
10. “CRI for PI” means a competitiveness reinforcement initiative for productive innovation to be carried out under Part 3.1.1 of the Project (also referred to as *Iniciativas de Vinculación Academia-Industria* under the Borrower’s document entitled, *Estudio de Preinversión a Nivel Perfil “Mejoramiento y Ampliación de los Servicios de CTI para Fortalecer el Sistema Nacional de Ciencia, Tecnología e Innovación”*).

11. “DGTP” means the Borrower’s General Directorate of the Public Treasury (*Dirección General del Tesoro Público*) within the Borrower’s Ministry of Economy and Finance.
12. “Eligible Grantee” means: (a) with respect to a Research Network Grant, a Contract Research Grant, or an Academic Entrepreneurship Grant, a Peruvian university, PRI or CITE; (b) with respect to an Institutional Alliance Grant, a Public University; (c) with respect to a Type 1 Research Grant or a Type 2 Research Grant, a Peruvian university or a PRI; (d) with respect to a Laboratory Strengthening Grant, a Public University, a PRI, a public CITE, or INACAL; and (e) with respect to a Laboratory Accreditation Grant or a Laboratory Product Testing Grant, a Peruvian university, PRI, CITE, or other STI Institution; and, in each of the cases (a) through (e), which has met the criteria set forth in the POM for receiving the relevant Grant.
13. “Eligible Grantee Operational Expenses” means incremental operational expenses of the relevant Eligible Grantee that are directly related to the activities financed by the relevant Grant, including travel, subscriptions to databases, and logistical activities (*e.g.*, related to organization of workshops).
14. “Eligible Grant Expenditures” means, with respect to a Grant, the expenditures that are eligible to be financed from the proceeds of such Grant as further set out in the POM, which shall exclude Excluded Expenditures, and shall include the following as relevant to such Grant: (i) equipment and durable goods (including software and hardware); (ii) materials and supplies; (iii) Eligible Grantee Operational Expenses; (iv) travel expenses of visiting researchers and academics (both to and from Peru) participating in the relevant Sub-Project; (v) costs of incremental staff or consultants of the Eligible Grantee or that are otherwise necessary for carrying out the relevant Sub-Project; (vi) expenses related to the design and application for a patent or other intellectual property rights on products or findings generated by the relevant Sub-Project; (vii) prototype testing or validation; (viii) dissemination of findings and communication about the activities under the relevant Sub-Project; (ix) in the case of Grants under Part 2.2.2(b), research expenses including publication expenses of recipients of Scholarships; and (x) in the case of Grants under Part 2.1.1 of the Project, enrollment fees and tuition for Eligible Students who have received Scholarships.
15. “Eligible Private Sector Firm” means a private sector firm that has met the criteria set forth in the POM for participating in a Contract Research Sub-Project under Part 3.2.1(a) of the Project.
16. “Eligible Public University” means a Public University that has met the criteria set forth in the POM for providing Scholarships financed from Loan proceeds under Part 2.1.2 of the Project.
17. “Eligible Student” means an individual Peruvian citizen admitted to a doctoral program supported by Part 2.1 of the Project who is eligible to benefit from a Scholarship in accordance with the criteria set forth in the POM.
18. “Environmental and Social Commitment Plan” or “ESCP” means the environmental and social commitment plan for the Project, dated December 10, 2021, as the same may be amended from time to time in accordance with the provisions thereof, which sets out the

material measures and actions that the Borrower shall carry out or cause to be carried out to address the potential environmental and social risks and impacts of the Project, including the timeframes of the actions and measures, institutional, staffing, training, monitoring and reporting arrangements, and any environmental and social instruments to be prepared thereunder.

19. “Environmental and Social Management Framework” or “ESMF” means the Borrower’s framework to be prepared, disclosed, consulted upon, and adopted for the Project, as set out in the ESCP, in accordance with the Environmental and Social Standards, as such framework may be amended from time to time with the agreement of the Bank.
20. “Environmental and Social Management Plan” or “ESMP” means each plan to be prepared, disclosed, consulted upon, and adopted for the Project, as set out in the ESCP, in accordance with the Environmental and Social Standards, as such plan may be amended from time to time with the agreement of the Bank.
21. “Environmental and Social Standards” or “ESSs” means, collectively: (i) “Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts”; (ii) “Environmental and Social Standard 2: Labor and Working Conditions”; (iii) “Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management”; (iv) “Environmental and Social Standard 4: Community Health and Safety”; (v) “Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement”; (vi) “Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources”; (vii) “Environmental and Social Standard 7: Indigenous Peoples/Sub-Saharan Historically Underserved Traditional Local Communities”; (viii) “Environmental and Social Standard 8: Cultural Heritage”; (ix) “Environmental and Social Standard 9: Financial Intermediaries”; (x) “Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure”; effective on October 1, 2018, as published by the Bank.
22. “Excluded Expenditure” means any expenditure:
 - (a) for goods or services supplied under a contract which any national or international financing institution or agency other than the Bank or the Association has financed or agreed to finance, or which the Bank or the Association has financed or agreed to finance under another loan, credit, or grant;
 - (b) for goods included in the following groups or sub-groups of the Standard International Trade Classification, Revision 3 (SITC, Rev.3), published by the United Nations in Statistical Papers, Series M, No. 34/Rev.3 (1986) (the SITC), or any successor groups or subgroups under future revisions to the SITC, as designated by the Bank by notice to the Borrower:

Group	Sub-group	Description of Item
112		Alcoholic beverages
121		Tobacco, un-manufactured, tobacco refuse
122		Tobacco, manufactured (whether or not containing tobacco substitutes)
525		Radioactive and associated materials

667		Pearls, precious and semiprecious stones, unworked or worked
718	718.7	Nuclear reactors, and parts thereof; fuel elements (cartridges), non-irradiated, for nuclear reactors
728	728.43	Tobacco processing machinery
897	897.3	Jewelry of gold, silver or platinum group metals (except watches and watch cases) and goldsmiths' or silversmiths' wares (including set gems)
971		Gold, non-monetary (excluding gold ores and concentrates)

- (c) for goods intended for a military or paramilitary purpose or for luxury consumption;
 - (d) for environmentally hazardous goods, the manufacture, use or import of which is prohibited under the laws of the Borrower or international agreements to which the Borrower is a party, and any other goods designated as environmentally hazardous by agreement between the Borrower and the Bank;
 - (e) on account of any payment prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations;
 - (f) with respect to which the Bank determines that corrupt, fraudulent, collusive or coercive practices were engaged in by representatives of the Borrower or other recipient of the Loan proceeds, without the Borrower (or other such recipient) having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur;
 - (g) land acquisition; and
 - (h) civil works, except for minor, limited-scale internal retrofitting and/or renovation activities at premises fully owned by the relevant Eligible Grantee which are required to accommodate equipment that constitutes an Eligible Grant Expenditure with respect to the relevant Grant.
23. "FONDECYT" means *Fondo Nacional de Desarrollo Científico, Tecnológico y de Innovación Tecnológica*, the Borrower's National Fund for Scientific, Technological and Innovation Development, an implementation agency assigned to CONCYTEC, as established and operating under the Borrower's Law No. 28303 dated July 27, 2004, as modified by Law No. 30806 of July 5, 2018, to be absorbed by merger into PROCENCIA pursuant to Supreme Decree No. 051-2021-PCM dated March 25, 2021.
24. "General Conditions" means the "International Bank for Reconstruction and Development General Conditions for IBRD Financing, Investment Project Financing", dated December 14, 2018 (revised on August 1, 2020, December 21, 2020, April 1, 2021, and January 1, 2022).
25. "Grant" means (a) a Research Network Grant under Part 1.1.5 of the Project, (b) an Institutional Alliance Grant under part 2.1.1 of the Project, (c) a Laboratory Strengthening Grant under Part 2.2.1 of the Project, (d) a Type 1 Research Grant under Part 2.2.2(a) of the Project, (e) a Type 2 Research Grant under Part 2.2.2(b) of the Project, (f) a Contract

Research Grant under Part 3.2.1(a) of the Project, (g) a Laboratory Accreditation Grant under Part 3.2.1(b) of the Project, (h) a Laboratory Product Testing Grant under Part 3.2.1(c) of the Project, or (i) an Academic Entrepreneurship Grant under Part 3.2.2 of the Project.

26. “Grant Agreement” means an agreement referred to in Section I.B.2 of Schedule 2 to this Agreement, as the same may be amended from time to time with the agreement of the Bank.
27. “Impact Evaluation” means an evaluation of the causal effect directly attributable to a Project intervention on the results expected to be achieved through its implementation, as further described in the POM.
28. “INACAL” means *Instituto Nacional de Calidad* (National Institute of Quality) a specialized technical public organism assigned to the Ministry of Production, created and operating under the Borrower’s Law No. 30224 dated July 10, 2014.
29. “INEI” means *Instituto Nacional de Estadística e Informática*, the Borrower’s National Institute of Statistics and Informatics, a specialized technical public organism assigned to the PCM, created and operating under the Borrower’s Law Decree N° 21372 dated December 30, 1975, as modified by Legislative Decree N° 604 dated April 30, 1990.
30. “Institutional Alliance” has the meaning provided in Part 2.1.1 of the Project.
31. “Institutional Alliance Grant” means any grant made or to be made out of the proceeds of the Loan under Part 2.1.1 of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures of an Institutional Alliance Sub-Project.
32. “Institutional Alliance Sub-Project” means, with respect to an Institutional Alliance Grant, the activities of the type described in Part 2.1.1 of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.
33. “Laboratory Accreditation Grant” means any grant made or to be made out of the proceeds of the Loan under Part 3.2.1(b) of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures under a Laboratory Accreditation Sub-Project.
34. “Laboratory Accreditation Sub-Project” means, with respect to a Laboratory Accreditation Grant, the activities of the type described in Part 3.2.1(b) of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.
35. “Laboratory Product Testing Grant” means any grant made or to be made out of the proceeds of the Loan under Part 3.2.1(c) of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures under a Laboratory Product Testing Sub-Project.
36. “Laboratory Product Testing Services” has the meaning provided in Part 3.2.1(b) of the Project.

37. “Laboratory Product Testing Sub-Project” means, with respect to a Laboratory Product Testing Grant, the activities of the type described in Part 3.2.1(c) of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.
38. “Laboratory Strengthening Grant” means any grant made or to be made out of the proceeds of the Loan under Part 2.2.1 of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures under a Laboratory Strengthening Sub-Project.
39. “Laboratory Strengthening Sub-Project” means, with respect to a Laboratory Strengthening Grant, the activities of the type described in Part 2.2 of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.
40. “Labor Management Procedures” or “LMP” means the Borrower’s labor management procedures to be prepared, disclosed, consulted upon, and adopted for the Project, as set out in the ESCP, in accordance with the Environmental and Social Standards, as such procedures may be amended from time to time with the agreement of the Bank.
41. “Operating Costs” means the following incremental recurrent expenditures of the Project: (i) operation and maintenance of vehicle, repairs, fuel and spare parts; (ii) computer maintenance, including hardware and software; (iii) communication costs and shipment costs (whenever these costs are not included in the cost of goods); (iv) office supplies; (v) rent and maintenance of office facilities; (vi) utilities and insurances, including health insurances and health-related services; (vii) travel and per diem costs for technical staff carrying out training, supervisory and quality control activities; and (viii) salaries of support staff for PROCIENCIA, but excluding salaries of the Borrower’s civil servants and PROCIENCIA regular staff.
42. “PCM” means *Presidencia del Consejo de Ministros*, the Borrower’s Presidency of the Council of Ministers, as established and operating under the Borrower’s Law No. 29158 dated December 20, 2007.
43. “PIT” means the Project implementation team created within PROCIENCIA and referred to in Section I.A.2 of Schedule 2 to this Agreement, or any successor to thereto acceptable to the Bank.
44. “PRI” means *institutos públicos de investigación*, public research institutes of the Borrower whose objective is to carry out research, development, promotion, and technology transfer, as referenced in the Borrower’s Law No. 30806 dated June 19, 2018.
45. “PROCIENCIA” means *Programa Nacional de Investigación Científica y Estudios Avanzados*, the Borrower’s National Program for Scientific Research and Advanced Studies, an entity assigned to CONCYTEC which absorbed FONDECYT by merger, created and operating pursuant to Supreme Decree of the PCM No. 051-2021-PCM dated March 25, 2021, or any successor thereto acceptable to the Bank.
46. “Procurement Regulations” means, for purposes of paragraph 87 of the Appendix to the General Conditions, the “World Bank Procurement Regulations for IPF Borrowers”, dated November 2020.

47. “Project Operational Manual” or “POM” means the operational manual for the Project to be prepared by the Borrower through PROCENCIA in consultation with CONCYTEC, adopted by the Borrower through PROCENCIA and found satisfactory to the Bank, as said manual may be amended from time to time with the Bank’s prior and written approval.
48. “Public University” means a *universidad pública*, a legal person of public law oriented to research and teaching and accredited by SUNEDU, as referenced in the Borrower’s Law No. 30220 dated July 9, 2014.
49. “Research Network Grant” means any grant made or to be made out of the proceeds of the Loan under Part 1.1.5 of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures under a Research Network Sub-Project.
50. “Research Network Sub-Project” means, with respect to a Research Network Grant, the activities of the type described in Part 1.1.5 of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.
51. “Scholarship” means a contribution made out of the proceeds of the Loan pursuant to a Student Agreement, to finance eligible expenditures, acceptable to the Bank (as the same are determined in accordance with a formula set forth in the Operational Manual), in respect of the relevant Eligible Student’s maintenance expenses, and social security contributions (health and pension) for a maximum of three (3) years, all under Part 2.1.2 of the Project (it being understood that the enrollment fees and tuition will be paid by the relevant Eligible Public University with proceeds of its Institutional Alliance Grant).
52. “Signature Date” means the later of the two dates on which the Borrower and the Bank signed this Agreement and such definition applies to all references to “the date of the Loan Agreement” in the General Conditions.
53. “SINACTI” means *Sistema Nacional de Ciencia, Tecnología e Innovación*, the Borrower’s National System of Science, Technology and Innovation to be created under Law No. 31250 (*Ley del Sistema Nacional de Ciencia, Tecnología e Innovación (SINACTI)*), as published in the official gazette *El Peruano* on July 2, 2021.
54. “SINEACE” means *Sistema Nacional de Evaluación, Acreditación y Certificación de la Calidad Educativa*, a set of legal entities, rules and procedures that ensure educational quality, whose governing body is the *Consejo Superior*, assigned to the Ministry of Education, and created and operating under the Borrower’s Law No. 28740 dated May 23, 2006.
55. “Specific Operational Manual” means, with respect to a Sub-Project, Scholarship or other Project activity subject to competitive selection, a manual, satisfactory to the Bank (and to be included in the POM), setting forth the criteria and procedures for selecting, appraising, approving, and supervising such Sub-Project, Scholarship, or activity, including without limitation, the relevant model form of Grant Agreement (in the case of a Sub-Project) or Student Agreement (in the case of a Scholarship), as said manual may be amended from time to time with the agreement of the Bank.
56. “STI” means science, technology and innovation.
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57. “STI Institutions” means *Instituciones de Ciencia, Tecnología e Innovación*, Peruvian public and private institutions of higher education, universities, service providers, research centers, ministries of the Borrower and their respective sector-oriented research and technology organizations and funding programs, as well as firms involved in scientific research and innovation.
58. “Strategic Areas” means (a) the low carbon and climate-resilient economy strategic area, (b) the health strategic area, and (c) the digital economy and ICT strategic area, as each such strategic area is further described in the Operational Manual.
59. “Student Agreement” means an agreement referred to in Section I.C.2 of Schedule 2 to this Agreement.
60. “Sub-Project” means (a) a Research Network Sub-Project, (b) an Institutional Alliance Sub-Project, (c) a Laboratory Strengthening Sub-Project, (d) a Type 1 Research Sub-Project, (e) a Type 2 Research Sub-Project, (f) a Contract Research Sub-Project, (g) a Laboratory Accreditation Sub-Project, (h) a Laboratory Product Testing Sub-Project, or (i) an Academic Entrepreneurship Sub-Project.
61. “SUNEDU” the *Superintendencia Nacional de Educación Superior Universitaria*, a specialized technical public organism assigned to the Ministry of Education, created and operating under the Borrower’s Law No. 30220 dated July 9, 2014.
62. “Training” means workshops and training expenditures under the Project, including purchase and publication of materials, rental of facilities, course fees, study tours, scholarships, stipends, travel and subsistence for participants of workshops, trainers and trainees (if applicable).
63. “Type 1 Research Grant” means any grant made or to be made out of the proceeds of the Loan under Part 2.2.2(a) of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures under a Type 1 Research Project.
64. “Type 1 Research Sub-Project” means, with respect to a Type 1 Research Grant, the activities of the type described in Part 2.2.(a) of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.
65. “Type 2 Research Grant” means any grant made or to be made out of the proceeds of the Loan under Part 2.2.2(b) of the Project to an Eligible Grantee pursuant to a Grant Agreement to finance Eligible Grant Expenditures under a Type 2 Research Project.
66. “Type 2 Research Sub-Project” means, with respect to a Type 2 Research Grant, the activities of the type described in Part 2.2.(b) of the Project to be carried out under the relevant Eligible Grantee’s competitively selected proposal.