Loan Agreement

(Strengthening the Science, Technology and Innovation System Project)

between

REPUBLIC OF PERU

and

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Dated, 08 DE FEBRERO, 2017
LOAN AGREEMENT

Agreement dated 08 FEBRERO, 2017, 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) constitute an integral 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, on the terms and conditions set forth or referred to in this Agreement, the amount of forty five million Dollars ($45,000,000), as such amount may be converted from time to time through a Currency Conversion in accordance with the provisions of Section 2.08 of this Agreement ("Loan"), to assist in financing the project described in Schedule I to this Agreement ("Project").

2.02. The Borrower may withdraw the proceeds of the Loan in accordance with Section IV 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 Director of Indebtedness and Public Treasury (DGETP), or any person whom any of them shall designate in writing.

2.03. The Front-end Fee payable by the Borrower shall be equal to one quarter of one percent (0.25%) of the Loan amount. The Borrower shall pay the Front-end Fee not later than sixty (60) days after the Effective Date.

2.04. The Commitment Charge payable by the Borrower shall be equal to one quarter of one percent (0.25%) per annum on the Unwithdrawn Loan Balance.

2.05. The interest payable by the Borrower for each Interest Period shall be at a rate equal to the Reference Rate for the Loan Currency plus the Fixed Spread provided, that upon a Conversion of all or any portion of the principal amount of the Loan, the interest payable by the Borrower during the Conversion Period on such amount shall be determined in accordance with the relevant provisions of Article IV of the General Conditions. Notwithstanding the foregoing, if any amount of the Withdrawn Loan Balance remains unpaid when due and such non-payment continues for a period of thirty (30) days, then the
interest payable by the Borrower shall instead be calculated as provided in Section 3.02 (e) of the General Conditions.

2.06. The Payment Dates are May 15 and November 15 in each year.

2.07. The principal amount of the Loan shall be repaid in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

2.08. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management: (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, withdrawn or unwithdrawn, to an Approved Currency; (ii) a change of the interest rate basis applicable to: (A) all or any portion of the principal amount of the Loan withdrawn and outstanding from a Variable Rate to a Fixed Rate, or vice versa; or (B) all or any portion of the principal amount of the Loan withdrawn and outstanding from a Variable Rate based on a Reference Rate and the Variable Spread to a Variable Rate based on a Fixed Reference Rate and the Variable Spread, or vice versa; or (C) all of the principal amount of the Loan withdrawn and outstanding from a Variable Rate based on a Variable Spread to a Variable Rate based on a Fixed Spread; and (iii) the setting of limits on the Variable Rate or the Reference Rate applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on the Variable Rate or the Reference Rate.

(b) Any conversion requested pursuant to paragraph (a) of this Section that is accepted by the Bank shall be considered a “Conversion”, as defined in the General Conditions, and shall be effected in accordance with the provisions of Article IV of the General Conditions and of the Conversion Guidelines.

ARTICLE III — PROJECT

3.01. The Borrower declares its commitment to the objective of the Project. To this end, the Borrower shall ensure that the Project is carried out by FONDECYT assigned (adscrito) to CONCYTEC, in accordance with the provisions of Article V of the General Conditions.

3.02. Without limitation upon the provisions of Section 3.01 of this Agreement, and except as the Borrower and the Bank shall otherwise agree, the Borrower through FONDECYT assigned (adscrito) to CONCYTEC, shall ensure that the Project is carried out in accordance with the provisions of Schedule 2 to this Agreement.

ARTICLE IV - EFFECTIVENESS; TERMINATION

4.01. The Additional Conditions of Effectiveness consist of the following:

(a) the Project Directive Committee has been created, in form and substance satisfactory to the Bank; and
(b) the Operational Manual has been adopted by the Project Directive Committee, in form and substance satisfactory to the Bank.

4.02. The Effectiveness Deadline is the date ninety (90) days after the date of this Agreement.

ARTICLE V — REPRESENTATIVE; ADDRESSES

5.01. The Borrower’s Representative is its Minister of Economy and Finance, provided that the Borrower’s Director of Indebtedness and Public Treasury, may, represent the Borrower to sign amendments and/or notices to this Agreement which are considered of an administrative and non-financial nature. The signing by such Director of an amendment and/or notice shall constitute a representation by the Borrower that any such amendment and/or notice is considered to be administrative and non-financial in nature.

5.02. The Borrower’s Address is:

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

Facsimile: +51 (1) 626-9921

5.03. The Bank’s Address is:

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

Telex: Facsimile:
248423(MCI) or 1-202-477-6391
64145(MCI)
AGREED at Lima, Peru, as of the day and year first above written.

REPUBLIC OF PERU

By

[Signature]

Authorized Representative

Name: ALFREDO TORNE VETTER

Title: MINISTRO DE ECONOMIA y FINANZAS

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By

[Signature]

Authorized Representative

Name: ALBERTO RODRIGUEZ

Title: COUNTRY DIRECTOR
SCHEDULE 1

Project Description

The objective of the Project is to strengthen the STI System to improve research skills and firm-level innovation.

The Project consists of the following parts:

Part 1: Improving the Institutional Framework of the National STI System

1.1. Improving the institutional framework of the STI System, through the provision of technical assistance to assess the efficiency and effectiveness of STI Public Institutions and STI programs and to provide recommendations to improve the overall functioning of the STI System, through the implementation of a PER on innovation.

1.2. Strengthening CONCYTEC management capacity, through the provision of technical assistance and training, and the acquisition of equipment to design and implement integrated information technology, as well as monitoring and evaluation systems needed to monitor programs and instruments of the STI Public Institutions.

Part 2: Strategic Programs, Productivity and Innovation Fund and Competitiveness Reinforcement Initiatives for Productive Innovation

2.1. Planning and Capacity Building for the Strategic Programs on Technological Innovation, through the provision of technical assistance for the design and implementation of a capacity building program, including the implementation of a public-private dialogue mechanism led by CONCYTEC, with a focus on both firms or clusters of firms within selected industries with the strongest potential to contribute to the Strategic Programs on Technological Innovation.

2.2. Competitiveness Reinforcement Initiatives for Productive Innovation, through the provision of technical assistance to: (a) implement up to five cluster-level CRI for PI Pilots in different regions of the Borrower’s territory, which pilots will identify the challenges that firms and clusters of firms within selected industries face; and (b) define a strategy to address these challenges and prepare a detailed technology upgrading plan for the cluster or industry in question in cooperation with relevant research institutes.

2.3. Establishment of a Productivity and Innovation Fund for Technology Transfer and Upgrading for the provision of Productive and Innovation Matching Grants functioning on a competitive basis, to firms and research institutions in order to finance the activities under the cluster level technology upgrading plans presented by the participants under Part 2.2 of the Project as well as to firms and research institutions operating in the industries contributing to the Strategic Programs on Technological Innovation identified under Part 2.1 of the Project.
2.4. **Impact Evaluation** of the activities under Parts 2.2 and 2.3 of the Project in order to strengthen, if needed, the design of the CRI for PI Pilots.

**Part 3: Research and Innovation Capacity**

Provision of financing Integrated Matching Grants or Nonintegrated Matching Grants for:

3.1. **Strengthening Human Capital for STI** by incentivizing research work and the number and quality of doctorate programs: (i) for research at various levels of experience (senior, postdoctoral and associate) through a competitive process; and (ii) to high education institutions in the Borrower’s territory in order to support the creation and consolidation of world class, high quality doctorate programs in science and engineering related to Strategic Programs on Technological Innovation, as well as cross-cutting research areas;

3.2. **Improvements of Research Equipment** to modernize, update and strengthen laboratory equipment of universities and research centers through the acquisition of laboratory equipment with up to date technologies related to Strategic Programs on Technological Innovation, as well as cross-cutting research areas; and

3.3. **Competitive Strategical Research and Innovation** to support research and technological development proposals related to Strategic Programs on Technological Innovation, as well as cross-cutting research areas.

**Part 4: Project Management**

Strengthening the institutional and organizational capacity of FONDECYT, required for the successful implementation of Project-supported activities, including compliance with procurement, safeguards, financial management, and monitoring and evaluation requirements.
SCHEDULE 2

Project Execution

Section I. Implementation Arrangements

A. Institutional Arrangements

1. Institutional Setting: To facilitate the carrying out of the Project by FONDECYT assigned (adscrito) to CONCYTEC, the Borrower shall ensure that:

(a) the entire proceeds of the Loan are made available to FONDECYT assigned (adscrito) to CONCYTEC, under terms and conditions approved by the Bank.

(b) the Project is carried out by FONDECYT assigned (adscrito) to CONCYTEC, in accordance with the provisions set forth in this Agreement, and the Operational Manual.

(c) FONDECYT assigned (adscrito) to CONCYTEC, shall promptly inform the Borrower and the Bank of any condition which interferes or threatens to interfere with the implementation of the Project and the achievement of the objective thereof.

(d) FONDECYT assigned (adscrito) to CONCYTEC, at the request of the Borrower and/or the Bank, shall exchange views with the Borrower and the Bank with regard to the progress of the Project and the achievement of the objective thereof.

(e) FONDECYT assigned (adscrito) to CONCYTEC, shall promptly refund to the Bank any proceeds from the Loan not used to finance Eligible Expenditures.

(f) FONDECYT assigned (adscrito) to CONCYTEC, shall cooperate with CONCYTEC, under an arrangement with terms and conditions approved by the Bank, and described in the Operational Manual.

2. Project Implementation Team: The Borrower shall ensure that FONDECYT assigned (adscrito) to CONCYTEC, shall: (a) maintain, until the completion of the Project, a team (the PIT) within FONDECYT responsible for the management, coordination, supervision, monitoring and evaluation of the Project, including all procurement, financial management, safeguard aspects related to the Project; and (b) hire no later than one month after the Effective Date and thereafter maintain key staff in said PIT with functions, experience, responsibilities and qualifications acceptable to the Bank, as described in the Operational Manual, including a Project coordinator, an adjunct Project coordinator; at least three technical experts, one procurement specialist, one financial management specialist, one budget and
planning specialist, one legal specialist, and one communication specialist, to support the implementation of the Project.

3. **Project Directive Committee**: The Borrower, through CONCYTEC, shall maintain, throughout the implementation of the Project, a Project Directive Committee: (a) responsible for, *inter alia*: (i) the governance of the Project, and (ii) the provision of general strategic guidance and implementation oversight for the Project, including the procedures for the selection and approval of Matching Grants proposals under Parts 2.3 and 3 of the Project; and (b) chaired by the President of CONCYTEC and comprised with adequate staff, all with functions, composition, powers, resources and competencies acceptable to the Bank, as defined in the Operational Manual.

**B. Matching Grants**

For the purposes of carrying out Parts 2.3 and 3 of the Project, the Borrower, through FONDECYT assigned (*adscrito*) to CONCYTEC, shall ensure the following:

1. that after having selected and approved a proposal presented by a Beneficiary in accordance with the guidelines and procedures set forth in the Operational Manual, FONDECYT assigned (*adscrito*) to CONCYTEC, shall enter into an agreement with each said Beneficiary ("Matching Grant Agreement"), under terms and conditions approved by the Bank and included in the Operational Manual, for the provision of the respective Matching Grant for the implementation of said proposal;

2. ensure that each Matching Grant Agreement is prepared based on the model form approved by the Bank and included in the Operational Manual, in which FONDECYT assigned (*adscrito*) to CONCYTEC, shall: (i) obtain rights adequate to protect their interests and those of the Borrower and the Bank including the right to suspend or terminate the right of the Beneficiary to use the proceeds of the Matching Grant or obtain a refund of all or any part of the amount of the Matching Grant then withdrawn, upon the Beneficiary’s failure to perform any of its obligations under the Matching Grant Agreement and inform the Borrower, the Project Directive Committee and the Bank; (ii) require each Beneficiary to carry out the approved proposal with due diligence and efficiency and in accordance with sound technological, environmental, social, innovation and scientific standards and practices satisfactory to the Bank, including in accordance with the provisions of the Anti-Corruption Guidelines applicable to recipients of Loan proceeds other than the Borrower and the ESMF; (iii) provide, promptly as needed, the resources required for the carrying out of the proposal; (iv) procure the goods, non-consulting services and consultants’ services to be financed out of the Matching Grant in accordance with the provisions of this Agreement and the Operational Manual; and (v) enable the PIT and the Bank to inspect the pertinent proposal, its operation and any relevant records and documents; and
3. that FONDECYT assigned (adscrito) to CONCYTEC, shall exercise its rights and carry out its obligations under each Matching Grant Agreement in such manner as to protect the interests of the Borrower, CONCYTEC and the Bank and to accomplish the purposes of the Loan. Except as the Bank shall otherwise agree, the Borrower shall ensure that FONDECYT assigned (adscrito) to CONCYTEC, shall not assign, amend, abrogate, waive, terminate or fail to enforce any Matching Grant Agreement or any provisions thereof.

C. Anti-Corruption

The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines.

D. Operational Manual and Safeguards

1. Operational Manual

   Except as the Bank shall otherwise agree, the Borrower shall ensure that CONCYTEC and FONDECYT assigned (adscrito) to CONCYTEC, shall not amend or waive the Operational Manual, or any provision thereof, or permit any such provision to be amended or waived. In case of any conflict between the provisions of the Operational Manual and the provisions of this Agreement, the provisions of this Agreement shall prevail.

2. Environmental Management Framework (EMF)

   a. The Borrower, through FONDECYT assigned (adscrito) to CONCYTEC, shall: (i) implement the Project in accordance with the EMF; (ii) comply with the procedures detailed in said EMF for environmental screening, evaluation, implementation and monitoring of Matching Grant proposals, including the procedures for the preparation of environmental and/or social management plans, if applicable; and (iii) implement and/or cause to be implemented, the pertinent environmental and social management plan prepared in accordance with the terms of the EMF in a manner acceptable to the Bank.

   b. Except as the Bank shall otherwise agree, the Borrower, through FONDECYT assigned (adscrito) to CONCYTEC shall not amend or waive the Environmental Management Framework (and any subsequent plan), or any provision thereof, or permit any such provision to be amended or waived. In case of any conflict between the provisions of the Environmental Management Framework (or any subsequent plan), and the provisions of this Agreement, the provisions of this Agreement shall prevail.

   c. The Borrower, through FONDECYT assigned (adscrito) to CONCYTEC, shall ensure that the terms of reference for any consultancy in respect of any Project activity shall be satisfactory to the Bank following its review
thereof and, to that end such terms of reference shall duly incorporate the requirements of the applicable Bank Safeguards Policies, as applied to the advice conveyed through such technical assistance.

Section II. Project Monitoring Reporting and Evaluation

A. Project Reports

1. The Borrower, through FONDECYT assigned (adscrito) to CONCYTEC shall monitor and evaluate the progress of the Project and prepare Project Reports 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 Operational Manual. Each Project Report shall cover the period of one calendar semester, and shall be furnished to the Bank not later than one month after the end of the period covered by each such report.

2. For purposes of Section 5.08 (c) of the General Conditions, the report on the execution of the Project and related plan required pursuant to that Section shall be furnished to the Bank not later than five (5) months after the Closing Date.

B. Financial Management, Financial Reports and Audits

1. The Borrower shall ensure that FONDECYT, assigned (adscrito) to CONCYTEC, shall maintain or cause to be maintained a financial management system in accordance with the provisions of Section 5.09 of the General Conditions.

2. The Borrower, through FONDECYT, assigned (adscrito) to CONCYTEC, shall prepare and furnish to the Bank not later than forty-five (45) days after the end of each calendar semester, interim unaudited financial reports for the Project covering the semester, in form and substance satisfactory to the Bank.

3. The Borrower, through FONDECYT, assigned (adscrito) to CONCYTEC, shall have the Financial Statements audited in accordance with the provisions of Section 5.09 (b) of the General Conditions. Each audit of the Financial Statements shall cover the period of one fiscal year of the Borrower, or any other period agreed with the Bank (not exceeding 18 months). The audited Financial Statements for each such period shall be furnished to the Bank not later than six (6) months after the end of such period.

Section III. Procurement

A. General

1. Goods and Non-consulting Services. All goods and non-consulting services required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in Section I of the Procurement Guidelines, and with the provisions of this Section.
2. **Consultants’ Services.** All consultants’ services required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in Sections I and IV of the Consultant Guidelines and with the provisions of this Section.

3. **Definitions.** The capitalized terms used below in this Section to describe particular procurement methods or methods of review by the Bank of particular contracts refer to the corresponding method described in Sections II and III of the Procurement Guidelines, or Sections II, III, IV and V of the Consultant Guidelines, as the case may be.

**B. Particular Methods of Procurement of Goods and Non-consulting Services**

1. **International Competitive Bidding.** Except as otherwise provided in paragraph 2 below, goods and non-consulting services shall be procured under contracts awarded on the basis of International Competitive Bidding.

2. **Other Methods of Procurement of Goods and Non-consulting Services.** The following methods, other than International Competitive Bidding, may be used for procurement of goods and non-consulting services for those contracts specified in the Procurement Plan: (a) National Competitive Bidding, subject to the additional provisions set forth in the following paragraph; (b) Shopping; and (c) Direct Contracting.

3. **Special procurement provisions:** The following shall apply to the procurement of goods, non-consulting services for National Competitive Bidding under the Project:

   (a) Foreign bidders shall not be required to be locally registered as a condition of participation in the bidding selection process;

   (b) No reference value (*precio referencial*) shall be required for publication in the bidding documents or used for the purpose of bid evaluation;

   (c) Award of contracts shall be based exclusively on price and, whenever appropriate, shall take into account factors that can be quantified objectively, and the procedure for such quantification shall be disclosed in the invitation to bid;

   (d) Foreign bidders shall be allowed to participate in National Competitive Biddings without restriction, and shall not be subject to any unjustified requirement which will affect their ability to bid such as, but not limited to, the requirement to authenticate (*legalizar*) their bidding documents or any document related to such bidding documents with either Peruvian Consulates, the Borrower’s Ministry of Foreign Affairs, or any Peruvian authorities as a prerequisite of bidding; and
(e) FONDECYT, assigned (adscrito) to CONCYTEC, shall use standard bidding documents and standard evaluation formats; all satisfactory to the Bank.

C. Particular Methods of Procurement of Consultants' Services

1. Quality- and Cost-based Selection. Except as otherwise provided in paragraph 2 below, consultants' services shall be procured under contracts awarded on the basis of Quality and Cost-based Selection.

2. Other Methods of Procurement of Consultants' Services. The following methods, other than Quality and Cost-based Selection, may be used for procurement of consultants’ services for those contracts which are specified in the Procurement Plan: (a) Quality-based Selection; (b) Selection under a Fixed Budget; (c) Least Cost-Selection; (d) Selection based on Consultants' Qualifications; (e) Single-source Selection of consulting firms; (f) Procedures set forth in paragraphs 5.1 and 5.5 of the Consultant Guidelines for the Selection of Individual Consultants; and (g) Single-source procedures for the Selection of Individual Consultants.

3. Special provisions for Consultants' Services. In addition and without limitation or restriction to any other provisions set forth in this section or in the Consultant Guidelines, the following provisions shall govern all procurement of consultants' services:

   (a) Foreign consultants shall not be required to be locally registered as a condition of participation in the selection process;

   (b) Foreign consultants shall not be required to authenticate (legalizar) any documentation related to their participation in the selection process with Peruvian Consulates, the Borrower’s Ministry of Foreign Affairs, or any Peruvian authorities as a condition of participation in said selection process;

   (c) FONDECYT, assigned (adscrito) to CONCYTEC, shall use standard requests for proposals and standard evaluation formats, all satisfactory to the Bank;

   (d) Foreign consultants, either individuals, or firms, shall not be required to pay fees to the Peruvian Consultants’ Association that are different from those required for Peruvian consultants’; and

   (e) No individual consultant financed out of the proceeds of the Loan shall, at the time he or she is carrying out his or her contractual obligations as consultant, hold civil service office or any other position in any agency or instrumentally of the Borrower, nor shall such consultant have any right to re-entry into any such office or position upon the conclusion of his or her consulting services.
D. Review by the Bank of Procurement Decisions

The Procurement Plan shall set forth those contracts, which shall be subject to the Bank’s Prior Review. All other contracts shall be subject to Post Review by the Bank.

E. Procurement Plan Execution System

The Borrower shall ensure that FONDECYT assigned (adscrito) to CONCYTEC, shall:
i) supply the STEP with the information contained in the initial Procurement Plan within sixty (60) days after the date of this Agreement; and

Section IV. Withdrawal of Loan Proceeds

A. General

1. The Borrower, through FONDECYT assigned (adscrito) to CONCYTEC, may withdraw the proceeds of the Loan in accordance with the provisions of Article II of the General Conditions, this Section, and such additional instructions as the Bank shall specify by notice to the Borrower (including the “World Bank Disbursement Guidelines for Projects” dated May 2006, as revised from time to time by the Bank and as made applicable to this Agreement pursuant to such instructions), to finance Eligible Expenditures as set forth in the table in paragraph 2 below.

2. The following table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Loan (“Category”), the allocation of the amounts of the Loan to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of the Loan Allocated (expressed in USD)</th>
<th>Percentage of Expenditures to be financed (inclusive of Taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Goods, non-consulting services, Operating Costs and Training required for Matching Grants under Parts 2.3, 3.1 (ii), 3.2 and 3.3 of the Project</td>
<td>25,391,600</td>
<td>100% of the amounts disbursed under each Matching Grant</td>
</tr>
<tr>
<td>(2) Training, non-consulting services and consultants’ services required for Matching Grants under Part 3.1 (i) of the Project</td>
<td>13,765,800</td>
<td>100% of amounts disbursed</td>
</tr>
</tbody>
</table>
(3) Goods, non-consulting services, and consultants' services, Operating Costs and Training required under the Project, excluding Parts 2.3 and 3 of the Project

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5,842,600</td>
<td>100%</td>
</tr>
<tr>
<td>TOTAL AMOUNT</td>
<td>45,000,000</td>
<td></td>
</tr>
</tbody>
</table>

B. Withdrawal Conditions; Withdrawal Period

1. Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made:

   (a) from the Loan Account until the Bank has received payment in full of the Front-end Fee; or

   (b) under Category (2), until and unless: (i) FONDECYT assigned (adscrito) to CONCYTEC, has selected a Third Party in accordance with the provisions of Section III of this Schedule for purposes of assisting FONDECYT in the carrying out of said Part of the Project; and (ii) a contract has been signed between FONDECYT and said Third Party, on terms and conditions acceptable to the Bank, which shall include, inter alia, the obligation of the Third Party to assist FONDECYT in managing Part 3.1 (i) of the Project.

2. The Closing Date is December 31, 2021.
SCHEDULE 3

Amortization Schedule

1. 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"). If the proceeds of the Loan have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined by the Bank by multiplying: (a) Withdrawn Loan Balance as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayable amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

<table>
<thead>
<tr>
<th>Principal Payment Date</th>
<th>Installment Share (Expressed as a Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 15, 2022</td>
<td>50%</td>
</tr>
<tr>
<td>November 15, 2022</td>
<td>50%</td>
</tr>
</tbody>
</table>

2. If the proceeds of the Loan have not been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:

(a) To the extent that any proceeds of the Loan have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the Withdrawn Loan Balance as of such date in accordance with paragraph 1 of this Schedule.

(b) Any amount withdrawn after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by the Bank by multiplying the amount of each such withdrawal by a fraction, the numerator of which is the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date ("Original Installment Share") and the denominator of which is the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such amounts repayable to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

3. (a) Amounts of the Loan withdrawn within two (2) calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.
(b) Notwithstanding the provisions of sub-paragraph (a) of this paragraph, if at any time the Bank adopts a due date billing system under which invoices are issued on or after the respective Principal Payment Date, the provisions of such sub-paragraph shall no longer apply to any withdrawals made after the adoption of such billing system.

4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the Withdrawn Loan Balance to an Approved Currency, the amount so converted in the Approved Currency that is repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by the Bank by multiplying such amount in its currency of denomination immediately prior to the Conversion by either: (i) the exchange rate that reflects the amounts of principal in the Approved Currency payable by the Bank under the Currency Hedge Transaction relating to the Conversion; or (ii) if the Bank so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.
APPENDIX

Section I. Definitions


3. "Beneficiary" means any firm, higher education institution, research institute, individual researcher or teams of researchers, which meet the eligibility criteria set forth in the Operational Manual to receive a Matching Grant.

4. "Category" means a category set forth in the table in Section IV of Schedule 2 to this Agreement.

5. "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 (organismo) assigned (adscrito) to PCM, as established and operating under the Borrower’s Law No 28303 dated July 27, 2004.


7. "CRI for PI Pilots" means competitiveness reinforcement initiatives for productive innovation to be carried out under Part 2.2 of the Project.

8. "Environmental Management Framework or EMF" means the Borrower’s framework dated September 13, 2016, acceptable to the Bank, published and available to the public on the website http://www.cienciactiva.gob.pe/images/documentos/informes/Informe-de-salvaguardas-Ambientales-Banco-Mundial.pdf, and on Bank’s InfoShop on September 19, 2016, which contains the environmental protection measures in respect of the Project, including, inter alia: (a) measures for chance findings of cultural property; (b) guidelines for the identification of existing environmental conditions and potential direct and indirect environmental impacts resulting from the carrying out of the Project; (c) guidelines for the carrying out of environmental assessments and the preparation of environmental management plans, when applicable; (d) the recommendation of mitigation measures for each negative impact identified; and (e) measures for enhancing each identified positive impact, as said framework may be amended from time to time with the agreement of the Bank.

10. “General Conditions” means the “International Bank for Reconstruction and Development General Conditions for Loans”, dated March 12, 2012, with the modifications set forth in Section II of this Appendix.

11. “Integrated Matching Grant” means a grant made or proposed to be made out of the proceeds of the Loan under Part 3 of the Project to finance integrated calls for proposals (i.e. including human capital, research equipment and research and development initiatives bundled together) for the activities mentioned in said Part of the Project.

12. “Matching Grant” means collectively a Productive Innovation Matching Grant, an Integrated Matching Grant, and a Nonintegrated Matching Grant.

13. “Matching Grant Agreement” means any of the agreements referred to in Section I.B of Schedule 2 to this Agreement.

14. “Nonintegrated Matching Grant” means a grant made or proposed to be made out of the proceeds of the Loan under Part 3 of the Project to finance nonintegrated calls for proposals (i.e. including human capital, research equipment or research and development initiatives carried out individually) in order to support the activities mentioned in said Part of the Project.

15. “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; (viii) salaries of support staff for FONDECYT, but excluding salaries of the Borrower’s civil servants and FONDECYT regular staff.

16. “Operational Manual” means the operational manual for the Project to be adopted by the Borrower, through the Project Directive Committee and found satisfactory to the Bank and which shall contain, inter alia: (i) the terms of reference, functions and responsibilities for the members or personnel of the PIT and the Project Directive Committee; (ii) the criteria, detailed rules and procedures for the selection, approval and the financing of proposals under Parts 2.3 and 3 of the Project; (iii) the procedures for procurement of goods, non-consulting services, consultants’ services, Operational Costs, and Training, as well as for financial management and audits under the Project; (iv) the indicators to be used in the monitoring and evaluation of the Project; (v) the flow and disbursement arrangements of Project funds; (vi) the model form for the Matching Grant Agreements; (vii) the terms of reference for the Third Party, the financial audit, the internal audit and other audits for the Project; (viii) the grievance redress mechanisms; (ix) the Environmental Management
Framework; and (x) any such other administrative, financial, technical and organizational arrangements and procedures as shall be required for the Project; as said manual may be amended from time to time with the Bank’s prior and written approval.

17. “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.

18. “PER” means public expenditure review.

19. “PIT” means the Project Implementation Team created within FONDECYT and referred to in Section I A 2 of Schedule 2 to this Agreement or any successor to thereto acceptable to the Bank.


21. “Procurement Plan” means FONDECYT’s procurement plan for the Project, dated October 12, 2016 and referred to in paragraph 1.18 of the Procurement Guidelines and paragraph 1.25 of the Consultant Guidelines, as the same shall be updated from time to time in accordance with the provisions of said paragraphs.

22. “Productive Innovation Matching Grant” means a grant made or proposed to be made out of the proceeds of the Loan under Part 2.3 of the Project for activities under the cluster level technology upgrading plan presented by Beneficiaries under Part 2.2 (b) of the Project as well as for Beneficiaries operating in the industries contributing to the Strategic Programs on Technological Innovation identified under Part 2.1 of the Project.

23. “Project Directive Committee” means the committee referred to in Section I A 4 of Schedule 2 to this Agreement or any successor to thereto acceptable to the Bank.

24. “STEP” means Systematic Tracking on Exchanges in Procurement, the Bank’s publicly accessible procurement plan system.

25. “STI” means science, technology and innovation.

26. “STI Public Institutions” means the institutions established in the Borrower’s territory and operating in the area of science, technology and innovation, as listed and described in the Operational Manual, as said list may be updated from time to time with the Bank’s prior and written approval.

27. “STI System” means the Borrower’s national system of science, technology, and innovation, which includes all relevant public and private higher education institutions, universities, service providers, research centers, Borrower’s ministries and their respective sector-oriented research and technology organizations and funding programs, as well as firms involved in scientific research and innovation.
28. “Strategic Programs on Technological Innovation” means the programs established by CONCYTEC on technological innovation, as described in the document “Proyecto: Mejoramiento y ampliación de los servicios del Sistema Nacional de Ciencia, Tecnología e Innovación Tecnológica”, Estudio de Preinversión a nivel de Factibilidad. Código SNIP: 317848. Ano 2016” and referenced in more detail in the Operational Manual.

29. “Third Party” means the entity referred to in Section IV.B.1 (c) of Schedule 2 to this Agreement.

30. “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).

Section II. Modifications to the General Conditions

The General Conditions are hereby modified as follows:

1. In the Table of Contents, the references to Sections, Section names and Section numbers are modified to reflect the modifications set forth in the paragraphs below.

2. Section 3.01. (Front-end Fee) is modified to read as follows:

“Section 3.01. Front-end Fee; Commitment Charge

(a) The Borrower shall pay the Bank a front-end fee on the Loan amount at the rate specified in the Loan Agreement (the “Front-end Fee”).

(b) The Borrower shall pay the Bank a commitment charge on the Unwithdrawn Loan Balance at the rate specified in the Loan Agreement (the “Commitment Charge”). The Commitment Charge shall accrue from a date sixty days after the date of the Loan Agreement to the respective dates on which amounts are withdrawn by the Borrower from the Loan Account or cancelled. The Commitment Charge shall be payable semi-annually in arrears on each Payment Date.”

3. In the Appendix, Definitions, all relevant references to Section numbers and paragraphs are modified, as necessary, to reflect the modification set forth in paragraph 2 above.

4. The Appendix is modified by inserting a new paragraph 19 with the following definition of “Commitment Charge”, and renumbering the subsequent paragraphs accordingly:

“19. “Commitment Charge” means the commitment charge specified in the Loan Agreement for the purpose of Section 3.01(b).”

5. In the renumbered paragraph 49 (originally paragraph 48) of the Appendix, the definition of “Front-end Fee” is modified by replacing the reference to Section 3.01 with Section 3.01 (a).
6. In the renumbered paragraph 68 (originally paragraph 67) of the Appendix, the definition of the term “Loan Payment” is modified to read as follows:

“68. “Loan Payment” means any amount payable by the Loan Parties to the Bank pursuant to the Legal Agreements or these General Conditions, including (but not limited to) any amount of the Withdrawn Loan Balance, interest, the Front-end Fee, the Commitment Charge, interest at the Default Interest Rate (if any), any prepayment premium, any transaction fee for a Conversion or early termination of a Conversion, the Variable Spread Fixing Charge (if any), any premium payable upon the establishment of an Interest Rate Cap or Interest Rate Collar, and any Unwinding Amount payable by the Borrower.”

7. In the renumbered paragraph 73 (originally paragraph 72) of the Appendix, the definition of “Payment Date” is modified by deleting the word “is” and inserting the words “and Commitment Charge are” after the word “interest”.