## **TC DOCUMENT**

#### I. Basic Information for TC

Country/Region:	Regional
■ TC Name:	Korea-LAC Tech Corps Program
TC Number:	RG-T3174
■ Team Leader/Members:	Geovana Acosta (IFD/CTI), Team Leader; Roberto Juan Garcia Lopez (IFD/FMM); Seojeong Kim (IFD/IFD); Yohana Beatriz Gonzalez Alzualde (IFD/CTI); Betina Hennig (LEG/SGO); and Maria Laura Smaldone (BDA/ACP); y Ana Maria Salamanca (HRD/PLR).
■ Taxonomy:	Research and Dissemination
<ul> <li>Date of TC Abstract authorization</li> </ul>	August 24, 2018
Beneficiary:	All 26 IDB's borrowing member countries
Executing Agency:	The Inter-American Development Bank (Component 2 and Sub-component 1-ii) and selected Korean University (ies) (Sub-component 1-i)
Donors providing funding:	Knowledge Partnership Korea Fund for Technology and Innovation (KPK)
■ IDB Funding Requested:	US\$3,000,000.00
Local counterpart funding, if any:	US\$345,000 (Third party funding expected from Korean universities / cash or in-kind)
Disbursement period:	36 months
Required start date:	October 2018
Types of consultants:	Individual consultants / consulting firms
Prepared by Unit:	Competitiveness, Technology and Innovation Division (IFD/CTI)
<ul> <li>Unit of Disbursement Responsibility:</li> </ul>	Institutions for Development Sector (IFD/IFD)
TC included in Country Strategy (y/n):	N/A
TC included in CPD (y/n):	N/A
• Alignment to the Update to the Institutional Strategy 2010-2020:	Productivity and innovation; and Institutional capacity and rule of law

## II. Objectives and Justification of the TC

2.1 Worldwide technology is transforming our societies and economies by changing the ways in which people interact, businesses function and innovate, and governments design and implement policies. Given the unprecedented dimension and speed of this transformation, concerns have emerged about the preparedness of Latin American and Caribbean (LAC) economies to face these challenges, especially because of the weakness of the region's educational systems, the limited broadband coverage, and the fact that most firms are not engaged in innovation activities. Among other actions, improving the supply of specialized human capital and increasing Information and Communications Technology (ICT) knowledge will be critical to take full advantage of the possibilities of the technological transformation and to mitigate its negative effects to the economy and the whole society. In fact, policy makers worldwide are

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

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- particularly interested in the supply of scientists, engineers and ICT experts because of their direct involvement in technical change and the ongoing digital transformation.<sup>3</sup>
- 2.2 The Republic of Korea (Korea) represents a paradigm of innovation-led economic development. The country has changed its economic structure in favor of more technologically sophisticated industries and has diversified the number and nature of its productive specialization.<sup>4</sup> Today Korea is a major contributor to the accelerating development of all ICT technologies.<sup>5</sup> Its economic transformation has been achieved in close collaboration between the government, industry and the academic community. Among its strengths, Korea has one of the highest rates of spending on Research and Development (R&D) in the world; it also has a highly educated labor force with a strong interest in science and technology. Many higher education institutions in Korea provide innovative and high-quality programs, which constitutes an important contribution to its reputation as a global ICT leader.
- 2.3 The Inter-American Development Bank (the Bank), with the financial support of the Korea Poverty Reduction Fund, approved in 2015 the Korea-LAC Scholarship Program (KLSP) (RG-T2579) to contribute to enhancing the analytical and managerial skills of the public-sector workforce in the LAC region. Under this initiative, 26 public officials from 16 LAC countries have benefitted from a full scholarship to obtain a master's degree in public management or public policy for a period of 18 months in two competitively selected Korean institutions. The scholarship recipients have successfully participated in rigorous academic and extra-curricular activities including field trips, a joint training with Samsung and internship programs at Korean public institutions, among others. Upon the completion of the program, the scholarship awardees already returned or are expected to return to the public sector of their home countries by early 2019; and will work for at least 24 months in the public sector of their respective countries.
- 2.4 A mid-term external assessment found the KLSP to be ideally and uniquely designed to train LAC officials. The evaluation especially praised the KLSP's achievements as the program has allowed the scholarship recipients to develop academic and professional knowledge associated with hands-on experience in the public sector in Korea. At the same time, the evaluation found that the KLSP contributed to an enhanced globalization of Korean institutions through strengthening their network in the region, and with LAC public officials and institutions. As part of its conclusions, the assessment recommended to maintain a Master's degree program in public management and policy but extend the scope to emerging areas such as productive diversification development, ICT, e-government and digital-economy, science and technology development and application, among others. The assessment also suggested to make efforts to increase the number of participating LAC countries, and to raise the number of students per institution to secure proper economies of scale.
- 2.5 In October 2017, the Bank and the Ministry of Economy and Finance (MOEF) of Korea signed a Memorandum of Understanding (MOU) to foster opportunities for development of talent by leveraging grant resources provided by the MOEF. This MOU considers scholarship and capacity building programs in high-level institutions in Korea as one of the main activities, which is undoubtedly in line with the primary goal

DECD (2017). Innovation, Science and Technology Sector Harnework Document (City 27 91-5). September 2017.
 OECD (2017), OECD Science, Technology and Industry Scoreboard 2017: The digital transformation: Korea. OECD Publishing, Paris.

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OECD (2017), OECD Science, Technology and Industry Scoreboard 2017: The digital transformation. OECD Publishing, Paris

IDB (2017). Innovation, Science and Technology Sector Framework Document (GN-2791-5). September 2017.

- of the KLSP. To complement this effort, the Bank and the MOEF signed in April 2018 a new MOU to support LAC public officials to improve their analytical, managerial and information skills, and to promote knowledge transfer from Korea to the region by providing Korean young professionals the opportunity to contribute and gain professional and cultural experience in countries of the region.
- 2.6 Under this new framework, the Bank and the MOEF agreed to structure a technical cooperation with two components: a <a href="LAC Tech Corps">LAC Tech Corps</a> component will finance scholarships for LAC public officials to pursue a master's degree in Korea for a period of 16-18 months, taking into consideration the lessons learned from the KLSP mid-term assessment. Extended scope to ICT-related areas will be introduced. Meanwhile, the Korea Tech Corps component will pay attention to the challenge in LAC associated with a shortage of professionals equipped with in-demand ICT skills and knowledge. Considering that Korea provides a successful example of developing and training talent in ICT-related areas, this component will finance the deployment of Korean Tech Corps (KTC) to support ICT-focused projects and/or provide ICT-based solutions tailored to specific business needs of public agencies, public enterprises and/or private companies in select LAC countries.
- 2.7 This Technical Cooperation (TC) is consistent with the Update to the Institutional Strategy 2010-2020 (AB-3008) and is aligned with the development challenge of productivity and innovation, by deploying KTCs with ICT expertise to support ICT-related projects in LAC countries and/or develop ICT-based solutions tailored to the business needs of LAC countries. The TC is also aligned with the cross-cutting theme of institutional capacity and rule of Law, by providing LAC mid-level public officials with full scholarships to pursue a master's degree in public management or public policy with ICT-related areas.

# III. Description of Activities/Components and Budget

- 3.1 **Component 1. LAC Tech Corps (US\$1,345,000).** This component will be structured in two Sub-components: (i) Scholarships; and (ii) Overall management.
- 3.2 Sub-component 1-(i) Scholarships: will finance up to 20-25<sup>6</sup> scholarships for mid-level public officials from borrowing member countries of the Bank. These scholarships will cover the full tuition for a master's degree in public management or public policy with ICT-related specializations or other relevant areas with an ICT focus, and will include accommodation, monthly allowance for living expenses, educational materials, health insurance, travel to and from Korea, and other related eligible expenses. All degree courses will be conducted in English for a period of 16-18 months. A basic Korean language course and an orientation session will be included in the program to facilitate the integration of scholarship recipients to the Korean society.
- 3.3 Sub-component 1-(ii) Overall management: will finance consulting services and other activities for the overall management of the LAC Tech Corps. The overall management will encompass the tasks related to the: preparation, implementation and evaluation of the program, including the selection of host universities;<sup>7</sup> promotion and coordination of the program in Korea and LAC countries; monitoring and management of the program, among others.

The ultimate number of scholarships will be subject to the final budget and financial contribution from Korean host universities.
 Between two and three universities (host institutions) are expected to participate in the program. Final number of universities will be subject to effective universities' financial proposals and contributions, and consequently final budget.

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- 3.4 **Selection of Korean universities.** A pool of qualified higher education institutions in Korea will be invited to submit their proposals to participate in the LAC Tech Corps. An international group of experts will be invited as an external panel to assess proposals submitted by Korean institutions and make a recommendation on the selection of host institutions on the basis of: (i) their overall proposal for the program, academic strength and experience in similar initiatives; and (ii) their proposed financial contribution<sup>8</sup> (third party funding) to partially finance the full cost of these scholarships. The financial contribution to be provided by the participating institutions is preliminarily estimated to be about US\$345,000.
- 3.5 **Nomination of candidates for scholarships.** Each government of the 26 borrowing member countries of the Bank will be requested to nominate up to 3-6 mid-level public officials that meet pre-identified eligibility criteria. The selection of these nominees will be competitive, transparent and highly publicized by the respective government agencies, and based on objective criteria. The corresponding liaison entity will present an official nomination letter on behalf of its government. This communication will present government's list of candidates to the Bank and will express its commitment to: (i) release scholarship beneficiaries from their work duties for the entire length of the program; (ii) provide scholarship's beneficiaries if there are any benefits mandated by their local laws and regulations in terms of salary for the length of the program; and (iii) assign a work position to scholarship beneficiaries for a period of 24 consecutive months upon the completion of their studies in Korea.
- 3.6 Selection of scholarship recipients. All candidate students will be government officials nominated by their respective LAC government entities in coordination with the Bank; and will be selected by Korean host institutions based on their existing admissions criteria and student's merits. Gender and region balance will be considered to select the final beneficiary students, provided that the candidates meet the eligibility criteria pre-determined by the IDB and are selected based on the existing admission criteria of the host university(ies) in a transparent and competitive way. As part of the selection process, students will sign a written commitment to repay the total amount of the scholarship in the case of: (i) failure to complete the master's degree; (ii) failure to comply with the terms and conditions of the scholarship; (iii) failure to return to their home country upon the completion of the scholarship; and/or (iv) failure to work in the public sector for at least 24 consecutive months upon their return to their home country.
- 3.7 **Component 2. Korea Tech Corps (US\$2,000,000).** This component will finance the deployment of 20-30 KTCs<sup>10</sup> with expertise in ICT-related areas, preferably holding master's degree with ICT background or 3 years of relevant work experience.<sup>11</sup> Proficiency in English is a requirement to participate in the program. Working knowledge of one of the Bank's additional official languages (e.g. Spanish, Portuguese, or French) will be desirable. The program will cover honorarium, and the

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<sup>8</sup> Universities are expected to provide their contribution in cash or in-kind, depending on the scholarships offered as part of their proposal.

<sup>&</sup>lt;sup>9</sup> See Annex III, page 42.

The term KTC is referred to a group of Korean technology's young professionals. The ultimate number of KTCs will be subject to: (i) ) effective supply and demand; and (ii) the final KTC cost, which is subject to KTC requirements per position and Bank's policy compensation.

<sup>&</sup>lt;sup>11</sup> Background requirement will be adapted to accommodate specific demand. The maximum age to participate as a KTC will be 37 years old at the moment of the application to the program.

- applicable benefits as per Bank policy such as travel from and to Korea, local language program, cultural adaptation and other related expenses.<sup>12</sup>
- 3.8 KTCs will support ICT-related projects in LAC countries and/or develop ICT-based solutions tailored to specific business needs of public or private institutions. The KTCs will be deployed in public agencies or private companies in select LAC countries for a period of up to 12 months.<sup>13</sup> The first phase of insertion (1-3 months approximately) is contemplated to allow for cultural adaptation, the study of the local language, and obtaining of knowledge of the Bank's activities in the country. The second phase (9-11 months) corresponds to the labor insertion phase in specific public agencies or private companies. The duration of these phases may vary depending on the profile of each candidate to be identified. The Bank will contract KTC under the modality of consultants following Bank's policies and procedures.<sup>14</sup> The IFD/CTI Specialist in the Country Offices will support the coordination of KTCs and supervise their performance.
- 3.9 In coordination with innovation agencies, productive sector associations, and/or entrepreneurship agencies, IFD/CTI will coordinate calls for expressions of interest from companies and institutions in the region that want to benefit from the contribution of KTCs with qualified knowledge in digital technologies. The selected host companies are expected to sign a Collaboration Agreement with the Bank to establish the conditions that such entities shall comply with to be a beneficiary of the TC. The availability of staff that can interact fluently in English will be a condition for receiving professionals. A general KTC profile will be also elaborated to serve as a reference for both KTCs and companies.
- 3.10 Based on pre-identified demands in the region, and the general KTC profile, a selection process will be conducted with the support of a Korean agency. This agency will facilitate the process of KTC recruitment, including services associated with job advertisement, recruitment and a first screening of the qualified KTC candidates to ensure sufficient supply of qualified candidates for better quality and efficiency of the program. The Korean agency will send the information of qualified candidates to the Bank. Profiles will be analyzed by the Bank and candidate options will be sent to public agencies or private companies responding to the expressions of interest received. Selected Korean professionals will be invited to interviews with IFD/CTI and also with public agencies or private companies or preselected institutions to confirm interest from both sides. IFD/CTI will made the final selection decision. To enhance KTCs readiness to be deployed to LAC countries, pre-departure orientations will be provided in Korea.
- 3.11 A specialized company(ies) will be hired<sup>16</sup> by the program to support KTCs upon their arrival in his/her country of destination by providing logistical assistance and guidance, activities for cultural immersion, language classes, and general adaptation support. It is expected that between 1 to 4 KTCs will be assigned per country. Country selection will take into consideration the potential impact, demand and scale for management and supervision.

<sup>13</sup> Considerations for any extension of the insertion phase will be subject to a review of the business needs and the availability of resources, and in any case to the applicable Bank's policies and procedures.

<sup>14</sup> Any other terms and conditions related to the services of the KTC not provided herein will be subject to the applicable Bank policies and procedures.

15 Considering the number of potential applicants, the Bank may desire to hire consultancy services to support the screening process and the selection of a short list per position.

As deemed appropriate, and subject to the availability of these services in the potential countries and their feasibility in terms of cost

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<sup>&</sup>lt;sup>12</sup> Selected KTC will be required to present proof of health insurance plan.

- 3.12 This component will also finance consulting services and other activities for the overall management of the Korea Tech Corps. The overall management will encompass the preparation, implementation and evaluation of the program, including the identification of job opportunities in LAC countries; promotion and coordination of the program in Korea and LAC countries; selection of KTCs and supply-demand matching; monitoring and management of the program, among others.
- 3.13 The total cost of this TC is expected to be US\$3,345,000, of which US\$3,000,000 will be financed by the Knowledge Partnership Korea Fund for Technology and Innovation (KPK), and US\$345,000 would be the third-party funding from selected Korean host university(ies). The third-party's contribution is expected to be provided in cash or in kind, depending on the services that Korean host university(ies) plan to offer as part of their proposals.

**Indicative Budget (US\$)** 

Activity/ Component	Description / subcomponent	IDB KPK	Counterpart Funding	Total Funding
1. LAC Tech Corps (ii) Cunive adm	(i) Scholarships: Full tuition, accommodation, allowance for living expenses, educational materials, health insurance, economy-class trip to and from Korea and other related expenses	810,000	345,000	1,155,000
	(ii) Overall management: External panel for university selection, monitoring and administration, communication and promotion, and final evaluation	190,000		190,000
2. Korea progra from a expense (ii) Over admini	(i) KTC deployment: Honorarium, training program and agencies, economy-class trip from and to Korea and other related expenses	1,830,000	•	1,830,000
	(ii) Overall management: Monitoring and administration, communication and promotion, and final evaluation	170,000	-	170,000
Total		3,000,000	345,000	3,345,000

# IV. Executing Agency and Execution Structure

- 4.1 The Bank will execute overall management of the TC through IFD/CTI, given the regional nature and scope of this program and IFD/CTI's expertise in the execution of technology- and innovation-oriented projects. The execution of Component 1-i will be carried out by the selected university(ies) pursuant to the IDB policies and procedures.
- 4.2 For the execution of the scholarship subcomponent, Korean education institution(s) will be competitively selected as host university(ies) based on recommendations of an external panel. An agreement will be signed between the Bank and the Korean university(ies) specifying the conditions for the use of the funds, the respective additional contribution (third-party funding) to be provided by the university, and other obligations. University(ies) are expected to provide their contribution in cash or in kind, depending on the services that they plan to offer as part of their proposals. Funds from the Bank will be expected to be disbursed to the Korean university(ies) upon approval of progress report to be submitted every semester as follows: 50% of the total amount upon approval of the first progress report; 25% upon approval of the second progress report; and 25% upon approval of the third progress report.

- 4.3 Under the supervision of IFD/CTI, a Korean agency, Human Resources Development Service of Korea (HRD Korea), specialized in the recruitment of Korean young professionals, is expected to support the program by facilitating the promotion and selection process of KTC candidates in Korea. A Collaboration Agreement will be signed with HRD Korea to frame the expected support they will provide in the selection process of KTC. An additional Korean agency Korea Trade-Investment Promotion Agency (KOTRA) will be hired to support pre-departure training activities. According the "Policy for the Selection and Contracting of Consulting Firms for Bank-Executed Operational Work" (GN-2765-1) and its Operational Guidelines, this agency is expected to be hired under the non-competitive method of single-source selection process. 17 As indicated in paragraph 3.9 a specialized company (ies) are also expected to be hired to support KTCs once they have arrived to his/her country of destination by providing logistical assistance and guidance, activities for cultural immersion, language classes, and general adaptation support. The firm(s) selected for this purpose will be hired based on their expertise and experience of cultural and professional immersion in LAC countries. Individual consultants will be also hired for the preparation, promotion, communication, monitoring, management and evaluation of the program.
- 4.4 **Procurement.** All necessary procurement for the scholarship sub-component will be carried out by the participating university(ies) in accordance with the "Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (GN-2349-9), and the "Policies for the Selection and Contracting of Consultants Financed by the IDB" (GN-2350-9). The activities to be executed by the Bank (Sub-component 1-(ii) and Component 2) are included in the Procurement Plan (Annex II) and will be contracted in accordance with Bank policies as follows: (i) AM-650 for Individual consultants; (ii) GN-2765-1 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature; and (iii) GN-2303-20 for logistics and other related services.
- 4.5 IFD/CTI will closely coordinate activities with LAC Governments, selected host universities, scholarship recipients, beneficiary host institutions in LAC countries, KTCs, and other relevant agencies and consultants to ensure a successful launch and execution of the program. During the different stages of the program implementation, the IFD/CTI will keep coordinating and communicating with the involved Country Offices in a timely manner.

# V. Major Issues

5.1 Proposed scholarship beneficiaries may not meet eligibility or admission requirements or may not finish the program. To mitigate this risk, the corresponding liaison entity of each country will certify in their recommendation letter that its nominees meet the eligibility requirements of the program and the admission criteria of the Korean host institution(s) they are applying for. Also, it will be mandatory for all participants to have at least five years of full-time professional working experience in the public sector. Candidates must also demonstrate their proficiency in oral and written English. The Bank will work with beneficiary countries to launch a promotional campaign to inform about the program and stimulate an active participation from the best possible candidates in every country.

<sup>17</sup> Given its particular expertise and knowledge required as well as the expected value of the contract (less than US\$100,000).

- 5.2 Selected scholarship recipients may not return to the public sector of their respective home countries upon completion of the program. The eligibility requirements will include a written commitment to return to the public sector in their respective countries for a period of 24 consecutive months; and the obligation of full scholarship repayment should candidates decide not to return.
- 5.3 Selected scholarship recipients may not be re-employed in the public sector of their respective countries. A written commitment of the participating governments to guarantee the employment of the students in the public sector upon their return will be requested as a critical requirement for the student selection process.
- 5.4 Selected educational institutions in Korea may not make a partial financial contribution to the program. Even if this risk is latent, the partial financial contribution requirement will be established in the call for proposals for Korean educational institutions. Since this risk cannot be mitigated, the number of scholarships would have to be reduced if this third-party funding does not actually materialize.
- 5.5 A sufficient pool of qualified KTC candidates may not be secured. A Korean agency specialized in the recruitment of Korean young professionals will support the program by facilitating the process of job announcement, promotion and listing of qualified candidates.
- 5.6 Selected KTCs may not be matched with LAC host institutions consistent with their field of expertise. To select and deploy KTCs tailored to the business needs, specific requirements and terms of reference will be determined based on effective demand to be identified during the mapping process of job opportunities.
- 5.7 Selected KTCs may have difficulties of cultural and professional immersion in LAC countries. To mitigate this risk, a specialized company(ies) will be hired by the program to support KTCs upon their arrival in his/her country of destination by providing logistical assistance and guidance, activities for cultural immersion, language classes, and general adaptation support and monitoring. County allocation will have into consideration the availability of this type of support.

# VI. Exceptions to Bank policy

6.1 There are no exceptions to Bank policy in this TC.

# VII. Environmental and Social Strategy

7.1 Given the nature of the project, there are no associated environmental or social risks. Based on the Environment and Safeguards Compliance Policy (OP-703) this operation is classified as "C", meaning that no environmental assessment studies or consultations are required for this category (see <u>Safeguard Policy Filter</u> and <u>Safeguard Screening Form</u>).

## **Required Annexes:**

Annex I: <u>Result Matrix</u>

Annex II: Procurement Plan

• Annex III: Terms of Reference

## **KOREA-LAC TECH CORPS PROGRAM**

## **RG-T3174**

## **CERTIFICATION**

I hereby certify that this operation was approved for financing under the **Knowledge Partnership** Korea Fund for Technology and Innovation (KPK), through a communication dated August 24, 2018 and signed by Byoung Kim. Also, I certify that resources from said fund are available for up to **US\$3,000,000** in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, representing a risk that will not be absorbed by the Fund.

Certified by:	Original signed	10/26/2018
_	Sonia M. Rivera	Date
	Chief	
	Grants and Co-Financing Management Unit	
	ORP/GCM	