

TC DOCUMENT

I. BASIC INFORMATION FOR TC

Country/Region:	Regional
TC Name:	Innovating in Public Communication of Science, Technology, and Innovation
TC Number:	RG-T2623
Team Members:	Carlos Guaipatin, Team leader (IFD/CTI); Santiago Nicolás Cañete (IFD/CTI); Marieke Gottsch (IFD/CTI), Pilar Jimenez de Arrechaga (LEG/SGO) and Adriana Oreamuno (IFD/CTI)
Type of project:	Research & Dissemination
Beneficiary:	Regional
Donor/Fund	Ordinary Capital Strategic Development Program for Institutions (INS)
Executing Agency and contact name:	Inter-American Development Bank (IDB)
IDB Funding Requested:	US\$ 200,000
Local counterpart funding, if any:	None
Disbursement period:	30 months
Required start date:	September 1 st , 2017
Types of consultants:	Firms and individual consultants
Prepared by Unit:	IFD/CTI
TC Included in Country Strategy (y/n):	N/A
TC included in CPD (y/n):	N/A
Unit of Disbursement Responsibility:	IFD/CTI
IDB Updated Institutional Strategy	Priorities identified in IDB's updated institutional strategy 2016-2016: Productivity and Innovation, Institutional Capacity and the rule of law <u>Contribution to Corporate Results Framework (CRF):</u> Global Innovation Index, Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery

II. OBJECTIVE AND JUSTIFICATION

- 2.1 Promoting innovation and the role of public communication.** The development and functioning of National Innovation Systems requires a permanent dialogue between government institutions in charge of promoting science, technology, and innovation (STI), the scientific community, the business sector, non-governmental organizations, and society as a whole. A cornerstone in the Inter-American Development Bank's (IDB) strategy for promoting STI in Latin America and the Caribbean (LAC) is that society and policymakers come to regard STI as the basis for the construction of knowledge economies, leading to enhanced productivity, global competitiveness, economic growth and, ultimately, social progress.
- 2.2** An effective public communication positions innovation in national and regional agendas, and helps to promote dialogue among key actors in innovation systems. Public communication of science, technology and innovation (PCSTI) is also fundamental to promote the effective appropriation of knowledge by non-scientific communities, and contributes to improve the environment where innovation is generated. PCSTI includes a wide variety of activities ranging from journalism and popular writing, to innovation and entrepreneurship TV programs, science

documentaries and outreach events, to public relations activities by STI agencies and research centers. Among these activities, the media plays a leading role as one of the most powerful mechanisms in communicating science and technology to society. Successful public communication emerges as a significant factor in shaping people's perception and understanding of STI as well as influencing companies' views and attitudes towards technology and innovation.

- 2.3** LAC has seen some valuable efforts to measure and assess public perception of science and technology. Studies ^{1 2} indicate that despite incremental progress there is still a low level of consumption and interest for topics of science and technology, coupled with a lack of information about them. They also indicate that even though careers in science and engineering are not considered especially attractive for students, there is an overall positive valuation of scientific and technological professions. In both, adults and young people, there is also an extended perception of the potential benefits that science and technology can have on people's lives and the development of their countries, not without considering the risks. In addition to this, the idea of innovation as an essential component of economic growth and social wellbeing is still not well understood. Furthermore, just as countries in the region show different levels of technological development, every country is also in a different stage regarding policies, instruments and programs to promote a culture of science and innovation through public communication.
- 2.4 Previous experiences in promoting communication of STI.** Within the framework of technical cooperation RG-T2001 (closed in January 2015), IFD/CTI has worked on improving the capacities of institutional communication to promote STI of selected national agencies and ministries in five countries (Argentina, Colombia, Costa Rica, Panama, Uruguay). Between 2011 and 2013, RG-T2001 produced, for each country, a general diagnosis of the state of public communication of STI including recommendations for the future. Also, the TC organized one training workshop on journalism and science communication in Washington D.C. for specialized journalists and communication officers from the participating countries. Furthermore, part of the resources of RG-T2001, along with resources from a Corporate Input Product (CIP), were used to explore innovative ideas in public communication of STI in the region; specifically, in the organization of the first Hackathon on STI journalism and communication.
- 2.5 Proving the hackathon concept.** In December 2014, IFD/CTI designed and organized the first-ever Hackathon of Science and Innovation Journalism, a regional event that combined thematic conferences with collaborative work to create new ideas and projects to improve public communication of STI in the region. The event, organized in partnership with the University of Guadalajara, resulted in the financing of two pilot projects of journalism and communication focusing on STI³. From here on, resources from an ongoing CIP and from other initiatives supported the organization of more hackathons, based on established partnerships and demand from countries and institutions. In December 2015, another Hackathon of Science and Innovation Journalism was organized with the University of Guadalajara, resulting in one pilot project being supported. In October 2016, with financing from the Compete Caribbean Program, IFD-CTI

¹ OEI (2009). *Cultura científica en Iberoamérica. Encuesta en grandes núcleos urbanos*. Proyecto Estándar Iberoamericano de Indicadores de Percepción Pública, Cultura Científica y Participación Ciudadana.

² Polino (2014). *Percepción y vocaciones científicas en los jóvenes iberoamericanos*. En Laspara y Munoz, Culturas científicas e innovadoras, progreso Social. Eudeba, Buenos Aires.

³ One of the pilot projects financed is a multiplatform (book, app y web) that contains touristic routes that are of scientific and technological interest in Chile. More information [here](#).

supported the organization of the first Caribbean Mediathon, a hackathon-style event to raise awareness of the importance of STI and its communication in the Caribbean. Also, in December 2016, IFD-CTI along with the Consejo Nacional de Innovación de Chile (CNID) and the Government of the Province of Magallanes, organized a thematic science communication hackathon in Punta Arenas, Chile, to generate project ideas to communicate the importance of Natural Laboratories (unique ecosystems) in Latin America⁴. Furthermore, with support from our operation in Panama, in December 2016, IFD-CTI was in charge of a one-day science communication hackathon in Panama, in the framework of the “Reach and Turn – Science Journalism Workshop” promoted by the United Nations University at Maastricht (UNU-MERIT), Fundación Ciudad del Saber, and Secretaría Nacional de Ciencia y Tecnología (SENACYT).

2.6 Outcomes. In all these hackathons, around 150 journalists, communicators and other professionals, from 25 countries⁵ have participated, many of them for the first time, stimulating them to cover STI topics and to seek more training in the area. There were generated almost 50 ideas for communication projects, 7 of which have been or are being supported with seed funding or mentoring. As part of the events, the participants were also trained in key topics of communication and innovation policy, highlighting its importance for development, as well as trained in innovation methodologies that are useful tools to put ideas into action (e.g. open data, lean startup, design thinking, business models). One of the main outcomes, as per feedback from evaluations, is the participants’ change towards an entrepreneurial mindset. Also, the events created opportunities to interact and work collaboratively with other colleagues in the task of engaging society with STI. The hackathon methodology applied to the generation of ideas to promote a culture of science and innovation in the region has been successfully proved as a concept and adjusted through pilot events. We developed an approach to STI communication and established a network of expert collaborators (institutions, experts) in these topics, generating interest from government agencies and private institutions in different countries to replicate this type of initiative and incorporate it as a possible instrument to their portfolio. In this respect, IFD-CTI has started conversations (some more advanced and some exploratory) with STI agencies and organizations from Uruguay (Agencia Nacional de Investigación e Innovación) Panamá (Secretaría Nacional de Ciencia, Tecnología e Innovación), Paraguay (Consejo Nacional de Ciencia y Tecnología), Peru (Agencia Innóvate-Ministerio de la Producción), Honduras (Instituto Hondureño de Ciencia y Tecnología), Ecuador (Fundación Darwin). Participants that have been part of the hackathons also showed interest to replicate the initiative in their countries, such as Costa Rica and El Salvador.

2.7 The Road Ahead. Despite advancements during the past years, lessons learned and operational experience indicate that much work remains to be done. Lessons learned from previous initiatives and the hackathons indicate the need to work with innovation agencies as key partners for the sustainability of the initiative, promoting their appropriation of the tool as an instrument to complement their efforts to support the growth of their STI ecosystems. Also, despite the flexibility of the methodology to adapt its scope and themes, there is a preference for local hackathons vs. regional, to reduce coordination issues among hackathon winning teams and to foster dialogue among relevant stakeholders at the country level, but also due to higher costs of regional ones. From the IFD/CTI experience in loan operations in the region, we see

⁴ One of the pilot projects that is being financed after this Hackaton is the *First South American Contest of Science Monologues* implemented by the Uruguayan group *Bardo Científico*. More information [here](#).

⁵ Argentina, Brazil, Uruguay, Paraguay, Ecuador, Chile, Venezuela, Colombia, Peru, Panama, Honduras, Nicaragua, El Salvador, Costa Rica, Guatemala, Mexico, United States, Dominican Republic, Barbados, Bahamas, Belize, Dominica, Grenada, Jamaica, St. Vincent, Trinidad and Tobago.

advancements in the consolidation of corporate communication offices in most of the STI agencies, but there is room for improvement regarding the implementation of policies and programs to promote a culture of science and innovation⁶, or in other words, strategies to engage society with science and innovation. Among countries with current IFD/CTI operations, Argentina⁷ is the most advanced, implementing a regular national STI communication program, based on a long tradition in the area. Besides Argentina, initial STI communication activities were incorporated in recent operations with Colombia⁸, Peru, Uruguay, Paraguay and Panama.

- 2.8** There is a need to continue strengthening institutional capacity for public communication of STI in national agencies across LAC, to facilitate coordination and exchanges among key national players in the region, as well as to consolidate policies and innovative instruments that may increasingly engage the public in STI topics. In addition, there is a need to support the generation of studies⁹ and evidence in the field of policy instruments to foster a culture of STI in the region.
- 2.9** The general objective of this Technical Cooperation is to strengthen Public Communication of Science, Technology and Innovation (PCSTI) in Latin America. The specific objectives include (a) supporting the improvement of STI communication policies through the study of current policies, instruments or programs to promote a culture of science, technology and innovation; (b) strengthening the capacity of STI agencies in the Region to implement and incorporate to their portfolio innovative instruments to support public communication of STI (e.g. Hackathon); and (c) support the implementation of these new policy instruments by financing innovative pilot projects aiming at promoting a culture of STI in the region, taking into account the incorporation of digital tools, new media narratives, open data, open innovation, data journalism, virtual reality and storytelling, among others.
- 2.10** This project represents a comprehensive effort to support science, technology and innovation agencies and other key actors of the STI sector in Latin America in strengthening their capabilities for PCSTI, and in turn fostering their innovation and productivity policy agendas. The results of this TC represent a contribution to the IDB operational program, as it opens avenues of dialogue around innovation policy as a pillar for growth and development, and more specifically could lead to the inclusion of STI communication components or sub components in loan operations. For the implementation of this technical cooperation we expect to work with agencies from 3 to 4 countries. As mentioned in section 2.6, we generated interest and have conversations with different countries. Currently, we selected two STI agencies, from whom we have received official letters: *Innovate Perú* and *Conacyt Paraguay*. The following criteria were used to select our counterparts and will continue to be used as the criteria to select the rest of the agencies we will work with:

⁶ In Spanish, so called *políticas de “popularización” o “divulgación” de ciencia, tecnología e innovación*.

⁷ Loan operations AR-L1141 and AR-L1181 supported the implementation of a variety of STI communication activities and outreach programs, among them the [Centro de Cultura de la Ciencia](#).

⁸ Colombia has a [national strategy of social appropriation of STI](#), which has communication as an important dimension.

⁹ The only example found in this regard in LAC is the UNESCO report: [Políticas Públicas e instrumentos para el desarrollo de la cultura científica en América Latina](#).

- a) *a connection to the IDB current or potential operational program in STI with the country*, indicated by an existing a loan or technical cooperation being executed, or established dialogues for potential work indicated by the Division Chief.
- b) *the existence of initial efforts in STI communication in recent years*, indicated by the implementation of at least one program/instrument/activity in the past two years.
- c) *the commitment of the agency* to at least: dedicate a person to act as the local coordinator, provide the venue for the event, and support with diffusion activities in the country. In most cases, this is likely to be the local counterpart funding.
- d) *the existence of a permanent communication or outreach unit/team* within the institution will be a plus.

These criteria are intended to foster ownership of the TC products and activities by the beneficiary agencies. Besides the participation of the agencies in the design and implementation process, knowledge and learning material will also be socialized, including the publication planned in Component 1 of this project.

III. DESCRIPTION OF ACTIVITIES AND OUTPUTS

3.1 Component 1: PCSTI Policy review and recommendations

This component consists of study to review the state and impact of policies, instruments and practices of public communication of science, technology and innovation (PCSTI), highlighting case studies from within and outside the region, including interventions of public innovation agencies. The project will seek the collaboration of experts and institutions in the field. The study shall result in a report/publication containing streamlined policy and practice recommendations, which will be distributed in the region, through Regional Policy Dialogues and operational missions, as a toolkit available for STI agencies and institutions that are interested in incorporating PCSTI policies, instruments and programs to their policy mix. The publication will be disseminated through a special event, media outlets, and digital marketing strategies using IDB and external channels.

3.2 Component 2: Strengthening the capacity of STI agencies to implement and incorporate innovative PCSTI instruments such as the Hackathons.

This component consists of the implementation of innovative PCSTI instruments such as the *STI Communication Hackathons*, along with public innovation agencies in the region. The agencies will receive technical and financial support from the Bank to co-organize a local *Hackathon*, including financing facilitators, speakers and participants of the event, or other logistic aspects. As counterpart in kind financing, the agencies will commit, at least, to dedicate a person to act as the local coordinator, provide a venue for the event, and support diffusion activities in the country. The goal is that the institutions can learn how to implement the *Hackathon* and ultimately incorporate it to their portfolio of instruments. The core of the *Hackathon* methodology is that participants from various disciplines work collaboratively to develop innovative ideas to improve STI communication and generate project proposals, business models, and prototypes that can be eligible for diverse sources of funding: IDB support for pilot implementation, financing from the Agency and/or external funding. The preparation for the Hackathons and its results will be disseminated producing multimedia content to be distributed mainly through institutional websites, newsletters to subscribers, the press, blogs and social media channels.

3.3 Component 3: Support the implementation of STI communication projects

This component will support the development of STI communication projects, including those awarded in the *Hackathons*, by offering pilot financing and/or additional mentoring to the most

innovative proposals, especially those incorporating digital tools, new media narratives, open innovation, data journalism, virtual reality, and storytelling. The selection criteria for the pilot projects awarded will include: overall quality of the proposal, creativity and originality, sustainability, and quality of the team. Through this component, the Bank will support innovation agencies in stimulating their local PCSTI ecosystems as well as act as a catalyzer of innovative projects in this field in Latin America. The projects and its results will be disseminated producing multimedia content to be distributed mainly through institutional websites, newsletters to subscribers, the press, blogs and social media channels.

3.4 Indicative Results Matrix

	Baseline Sep 2017	Unit of measure	Target at the end of the TC May 2019	Means of verification
Outcome statement:				
The capacity of STI agencies strengthened in terms of PCSTI	0	Document	As a result of the activities supported by this TC, STI participating agencies are more knowledgeable about the opportunities that PCSTI instruments and programs provide in terms of engaging citizen with STI and promoting a culture of innovation. This outcome will be reflected in action plans prepared by participating agencies highlighting, among others, lessons learned and future opportunities for incorporating PCSTI instruments and programs into their portfolio	Report/document defining initial guidelines for the replication of the Hackathon or other PCSTI related initiative
Output indicators:				
Component 1: PCSTI Policy Study review	0	Study	Review of the state and impact of policies, instruments and practices of public communication of science, technology and innovation (PCSTI), including recommendations, at least 1	Publication document/ Link
	0	Dissemination Event	Support the organization of an event for the dissemination of the publication	Report of the event
Component 2: Strengthening the capacity of STI agencies to implement and incorporate innovative PCSTI instruments such as the Hackathon	0	Hackathon Event	Organization of at least 3 STI Communication Hackathons	Website/Report of Hackathons
Component 3: Support the implementation of STI communication projects	0	Pilot project	Pilot financing of at least 6 STI communication projects	Project plan/consultancy contract with professional, organization or firm

3.5 The CTI team leader will report on major events / accomplishments of the project's implementation on a yearly basis. These updates shall be used as essential inputs for the development of reports to the Bank's Board and the Donors, especially the INS Technical Secretariat.

IV. BUDGET

- 4.1 The total amount of funding needed for this TC is US\$200,000. The allocations for each component are shown in the table below.

Indicative Budget

Activity/ Component	Description	IDB Funding	Total Funding
Component 1	Policy review and recommendations	60,000	60,000
Activity 1.1	Policy review and recommendations. Publication	40,000	40,000
Activity 1.2	Diffusion of the publication (event and/or other strategies)	20,000	20,000
Component 2	Strengthening the capacity of STI agencies to implement and incorporate innovative PCSTI instruments such as the Hackathon	80,000	80,000
Activity 2.1	Organization of at least 3 STI Communication Hackathons.	80,000	80,000
Component 3	Support the implementation of STI communication projects	60,000	60,000
Activity 3.1	Support the implementation of STI communication projects. At least 6 projects supported with seed funding and/or additional coaching/training.	60,000	60,000
Total		200,000	200,000

* There will be in-kind contribution from participating innovation agencies. Described in sections 2.10 and 3.2.

V. EXECUTING AGENCY AND EXECUTION STRUCTURE

- 5.1 The executing agency of this technical cooperation will be the Inter-American Development Bank through the Competitiveness, Technology and Innovation Division (IFD/CTI). This is consistent with the TC's specific objective, and aims at completing the tasks at hand in a cost-efficient manner and ensuring quality of the outputs. This approach will also benefit from utilizing the Bank's ability to execute technical cooperation and contributing with time of the project team and their knowledge to identify highly qualified international consultants based on their work experience in operations in different countries of the region. To ensure the efficient and timely completion of the technical cooperation the CTI division will review the progress in a well-timed manner. Furthermore, the knowledge generated by this experience will be disseminated in other LAC countries.
- 5.2 The project team has already obtained letters of interest from some public agencies in relation to the activities to be financed by this TC (see Annexes below). Additional non-objection letters will be obtained prior to the initiation of the activities in each country.
- 5.3 Furthermore, although the technical cooperation will be executed by the IDB, it will not supplement the budget of the CTI division.

- 5.4 The Bank will contract individual consultants, consulting firms and non-consulting services in accordance with the Bank's current procurement policies and procedures as established in documents AM-650, GN-2765-1 and GN-2303-20.
- 5.5 This technical cooperation meets the eligibility criteria and it is aligned with the Ordinary Capital Strategic Program for Institutional Development (INS), its framework document and operational guidelines (GN-2819-1).

VI. PROJECT RISKS AND ISSUES

- 6.1 A general risk arises from potential delays in execution due to coordination and articulation issues with agencies. Since the TC is executed by the Bank, this risk will be mitigated by taking an active leadership in the execution. Also, the criteria used to select the agencies will reduce this risk.
- 6.2 Another is found in the fact that personnel working for STI agencies in a project like this may be removed with a change of government. This risk may be mitigated through (i) focusing the training on mid-level, non-politically designated officers; (ii) conducting training through handbooks or other material that can be passed on.
- 6.3 Finally, a risk that might arise is not obtaining the non-objection letters mentioned 5.2 above from the countries participating in activities planned for components 2 and 3. This risk is mitigated by (i) the fact that the team has already obtained letters of interest from 2 countries and will not start activities until it obtains such letters for each country, and (b) the current execution of STI loan operations in potential participating countries, which contributes to a fluid dialogue with our counterparts and IDB official liaison institutions.

VII. EXCEPTIONS TO BANK POLICY

- 7.1 There are not exceptions to Bank policies to execute this TC.

VIII. ENVIRONMENTAL AND SOCIAL CLASSIFICATION

- 8.1 Given the nature of the program, there are no associated environmental or social risks. Based on the Environment and Safeguards Compliance Policy (OP-703) this operation is classified as "C." (See [Safeguards Policy Filter Report and the Screening Form](#)).

Required Annexes:

- [Results Matrix](#)
- [Terms of Reference for activities/components to be procured](#)
- [Procurement Plan](#)
- [Request Letters](#)

INNOVATING IN PUBLIC COMMUNICATION OF SCIENCE, TECHNOLOGY AND INNOVATION

RG-T2623

CERTIFICATION

I hereby certify that this operation was approved for financing under the **Ordinary Capital Strategic Development Program for Institutions (INS)** through a communication dated June 7, 2017 and signed by Kai Hertz (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$200,000** 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, represent a risk that will not be absorbed by the Fund.

CERTIFIED BY:

Original Firmado

09/08/2017

Sonia M. Rivera

Date

Division Chief

Grants and Co-Financing Management Unit

ORP/GCM

APPROVED BY:

Original Firmado

09/08/2017

Claudia Stevenson

Date

Jefe Interina de División

División de Competitividad e Innovación

IFD/CTI