

## TECHNICAL COOPERATION PROFILE

**JULY 14, 2008**

### **I. BASIC PROJECT DATA**

<b>Country:</b>	Regional	
<b>Program Name/Number:</b>	Enabling Technologies: Innovations for People with Disabilities. RG-T1585	
<b>Team Leader/Members:</b>	Carlos Guaipatin, team leader (SCL/SCT), María Victoria Arboleda (VPC/GCM); Claudio Santibañez (SCL/GDI); Javier Jiménez-Mosquera (LEG/SGO); and Carolina Hernández-Cartagena (SCL/SCT).	
<b>Date of Request:</b>	July 2, 2008	
<b>Beneficiary:</b>	Regional	
<b>Executing Agency:</b>	IADB Science and Technology Division	
<b>Financing Plan:</b>	IDB/(NO/CD) Social Inclusion Trust Fund	US\$750,000
	Local:	0
	Total:	US\$750,000
<b>Technical and Basic Responsibility</b>	SCL/SCT	
<b>Tentative Dates:</b>	September 2008 – June 2011	

### **II. BACKGROUND AND PROBLEM STATEMENT**

- 2.1 According to UN data, approximately 50 million people, about 10% of the population in Latin America and the Caribbean region (LAC) has a disability<sup>1</sup>. Although different countries in LAC have different definitions of disability, during the past decade, the concept of disability has evolved from a focus on impairments or medical conditions to a focus on exclusion. This conceptual shift acknowledges that persons with physical or mental impairments face barriers that impede their equal and full participation in society<sup>2</sup>. The Convention on the Rights of Persons with Disabilities – adopted by the United Nations General Assembly in December 2006 – has been instrumental in the evolution of the concept. The convention also marks an important step in the inclusion of persons with disabilities (PWD) in all aspects of life. The Convention, ratified by 20

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<sup>1</sup> According to the UN Convention on the Rights of Persons with Disabilities, “persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.”

<sup>2</sup> UN Convention on the Rights of Persons with Disabilities.

countries, allows countries to make a clear commitment to mainstreaming disability issues into national development agendas.

- 2.2 Despite the lack of consensus on a definition for disabilities, and the variety of methods of data collection across the region, recent census show that Brazil, Chile, Ecuador, Nicaragua and Panama have disability prevalence rates higher than 10% (14.5%, 12.9%, 12.1%, 10.3% and 11.3% respectively). Disability is an important cause and consequence of poverty and exclusion. According to the World Bank, around 82% of people with disabilities (PWD) in LAC live in poverty. PWD are more vulnerable to experience exclusion from the economic, social, and political life, because of stigmatization and/or lack of access to programs and facilities.
- 2.3 In all LAC, the employment rates for people with disabilities are lower than for those without and a high percentage work informally, or are underemployed. On average, 70% of PWD in the region are either unemployed or outside of the workforce. In Mexico, for instance, the general employment rate is 50%, while the rate for disabled persons is approximately 27%<sup>3</sup>, and 22.6% of those who are working receive less than a minimum wage. Similarly, in Brazil, 30% of PWD receive less than a minimum wage and in Chile only one third PWD who are employed have full time work. In Bolivia, almost 40% of PWD are self-employed or work informally, and in Honduras 73% are self-employed or work for no pay.
- 2.4 **Science, Technology and Disability.** It has been widely proven that the field of information and communication technologies (ICT) is a fertile ground for the economic and social inclusion of people with mobility impairments or physical limitations<sup>4</sup>. In principle, technology increases the possibilities for more participation of women and marginalized groups in education, labor markets, and society at large. For instance, jobs in the technology sector do not depend on physical strength, but instead on intellectual knowledge and experience, meaning that someone with a physical disability can perform the tasks at the same level as a non-disabled person.
- 2.5 However, the broad spectrum of opportunities available in the ICT field does not necessarily translate into increased participation of marginalized PWD in science and technology, whether it is in the job market or in access to the internet. This is true in developed as well as developing countries: In the United States, 21.6% of disabled people have home access to the Internet, while 41.1% of people without disabilities have access.<sup>5</sup> In developing countries, economic factors prevent many from accessing the Internet or other technologies, creating a “double marginality”, where people are excluded from access both by economic factors and by gender/disability/etc. While technology could make education more accessible to marginalized groups, PWD still have much lower literacy rates. In Honduras, for example, illiteracy rates of PWD reach 51% compared to 19% for the general

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<sup>3</sup> Philip O’Keefe, People with disabilities in India: from commitments to outcomes. World Bank, 2007.

<sup>4</sup> Mark Warschauer, Technology and Social Inclusion - Rethinking the Digital Divide. MIT Press, 2004.

<sup>5</sup> Mark Warschauer, Technology and Social Inclusion - Rethinking the Digital Divide. MIT Press, 2004.

population. In addition, it is estimated that only 20-30% of Latin American children with disabilities attend school.<sup>6</sup> While Science and Technology provides a venue out of poverty for marginalized groups, it seems that the barriers to education – which is crucial to enter the field – are still too high.

- 2.6 PWD can derive enormous benefits from advances in science, technology and innovation. A program with a special focus on disability, technology, and innovation will increase the possibilities of PWD to fully participate in society. This experience will in turn serve as a tool to help mainstream disability issues in other IADB programs.
- 2.7 **The Role of the IDB.** To date, the IDB has financed science and technology projects with more than \$2 billion. After the 2007 reorganization, all Science and Technology Programs were joined in the Science and Technology Division (SCT), creating a focal point for such programs. The division is staffed with experts in science, technology, IT, and innovation.
- 2.8 Typical IDB science and technology programs consisted of two major policy instruments: Competitive Research Grants for financing research activities, and Technology Development Funds, which aimed to boost innovation in the productive sector. However, relatively little attention has been given to the inclusion of marginalized groups, such as PWD, although these could benefit greatly from being included in technological advances, as mentioned above.
- 2.9 The Social Protection and Health Division of the IDB has been active in the work to streamline disability data and statistics in Latin America as well as inclusion in education and transport, and has taken an active role in the regional disability discussion since the Annual Meeting in 2002. SCT will draw on these experiences and incorporate them into this Technical Cooperation.
- 2.10 The Bank, and in particular SCT is the right interlocutor for a Technology for Disability initiative for several reasons:
  - a. SCT is gaining valuable experience in the area of innovation and social inclusion and it is natural to draw on this existing initiative when moving forward. With support from the Italian Trust Fund for Information and Communication Technology for Development and the Fund for Special Operations, SCT is currently carrying out the initiative “Innovation for Inclusive Development”, which will finance innovative projects in the region. A paper with the experiences of the initiative will be written. The initiative has shown that tapping into the private sector resources and spirit of innovation can benefit the poor in many ways.
  - b. “Innovation for Inclusive Development” has shown that a competition can be an effective instrument in driving innovations (technological as well as non-technological), unleashing creativity to benefit the poor. The Division wants to draw on this experience and use the competition as a more focused, clearly defined tool to unleash innovations to benefit people with disabilities.

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<sup>6</sup> Disability and Inclusive Development in Latin America and the Caribbean, World Bank.

- c. There is a clear demand from the IDB and from member countries that want to focus on social inclusion. There are currently two IDB operations (managed by SCT) that will include this focus, to help mainstream the topic and ensure that the IDB operations use the lessons learned from “Innovation for Inclusive Development”. The two operations are UR-L1030, Program for Technological Development (Uruguay), and AR-L1073, CCLIP: Program for the Support of Technological Innovation (Argentina). There is a great interest for new instruments that can be used in operations and this particular instrument should be shared within the Bank and with stakeholders.
- d. With ample experience in science and technology projects, the Bank has both the technical knowledge and a network of contacts that is unparalleled in the region. For instance, the Division is organizing the 2008 Policy Dialogue on Science and Technology, to take place in Lima, Peru, in November, where policy makers from South America come together to discuss science, technology and innovation. This gathering will be used as a platform to launch the new initiative, to showcase successful innovations and initiatives, and to raise awareness of the economic implications of excluding PWD from educational and labor opportunities. Close contact with Latin American organizations for PWD before the Dialogue will ensure the participation of stakeholders and the buy-in of the organizations<sup>7</sup>.
- e. Encouraging private sector involvement was one of the objectives for “Innovation for Inclusive Development”. Targeting the private sector was important to tap into a sector that is not as intimately linked to the development institutions as NGOs and institutions such as universities. This experience is valuable and will be used once again in the proposed TC.

### **III. PROGRAM OBJECTIVE AND DESCRIPTION**

- 3.1 The general objective is to encourage the development of innovations that improve the lives of PWD in LAC, and increase their participation in education and the work force and their inclusion in the economic, political, and socio-cultural spheres of society. The specific objective is to support the development and piloting of five to ten pilot projects that improve the quality of life and social and economic inclusion of PWD in LAC. The TC will have two components:

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<sup>7</sup> Organizations such as the Spanish Fundación Once, Inclusion International, FENOCORI in Nicaragua, and others, would be natural partners for cooperation.

3.2 **Component I: Competition/Call for Proposals.** This component will finance an international competition/call for proposals for innovations that can improve the situation of PWD in LAC, for instance in increased access to education or labor opportunities. The winners of the competition will receive non-reimbursable grants to implement their pilot projects. This component will allow for up to 50% of its funds to be designated to national competitions. The IDB will work with national agencies and national organizations for PWD to design a smaller competition, providing the necessary expert support<sup>8</sup>. This component will include:

- a. Design phase: The lessons learned from “Innovation for Inclusive Development” will be used to design a competition that is streamlined, targeted, and focused. A close cooperation with disability organizations in the region will ensure that PWD are represented both among the innovators and in the selection process, and in the design and dissemination processes.
- b. Launch, call for proposals, dissemination and selection of pilot projects: The Bank will work closely with organizations, the private sector, and governments in the region to disseminate information about the competition to a wide audience. This will include sessions at different events in the region and close cooperation with disability organizations<sup>9</sup>.

3.3 **Component II: Research, dissemination, documentation, and monitoring.** This component will finance extensive research, documentation, dissemination before, during, and after the call for proposals. The information obtained will be useful to provide the necessary data to measure project and to share lessons learned. This component will finance:

- a. Research: Using already existing materials, gather data on disability and inclusion in the countries involved. This involves research from disability organizations, the UN, the World Bank, WHO, PAHO, and others.
- b. Dissemination of lessons learned: Dissemination of the initiative and of its lessons learned will be an important activity. The final phases of the project will include the publishing of one or more policy papers to be shared with IDB departments and policy makers in LAC.
- c. Documentation: Documentation of the process, the competition, and the other activities will take place throughout the delivery of the project. This will allow lessons learned to be implemented in to Bank projects, mainstreaming disability issues into a wide range of operations.
- d. Monitoring: Each selected project will be carefully monitored and missions will be conducted during the implementation to ensure progress.

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<sup>8</sup> The countries will be informed about this at the Regional Policy Dialogue in Peru, in November 2008.

<sup>9</sup> Preferably, the competition will be launched at a disability-related event in Latin America, and by a high profile personality/celebrity.

#### IV. COST AND FINANCING

##### A. Budget

4.1 This TC total cost of is estimated at US\$750,000.

**Table IV-1. Summary Cost Table**

<b>Component 1: Competition/Call for Proposals:</b>			
<b>Expense Category</b>	<b>Units</b>	<b>Unit Cost</b>	<b>Total</b>
<b>1. Consulting Fees</b>			
Preparation/mapping/surveys/design/ dissemination	80 days	500	40,000
Screening and selection of pilot projects	80 days	500	40,000
<b>2. Funds for Innovation Competition</b>			
Prize money (up to 50% can be used for national contests)	9 grants	50,000	450,000
<b>3. Logistics</b>			
Travel			50,000
Website			10,000
<b>Component 2: Research, dissemination, documentation, and monitoring</b>			
<b>Expense Category</b>	<b>Units</b>	<b>Unit Cost</b>	<b>Total</b>
<b>1. Consulting Fees</b>			
Monitoring of pilot projects	100 days	500	50,000
Final reports and papers	50 days	500	25,000
Communications/Diffusion of lessons learned	130 days	500	65,000
<b>2. Logistics</b>			
Travel			20,000
<b>Total</b>			<b>750,000</b>

#### V. EVALUATION

5.1 All activities of this TC will be evaluated, and each pilot project will be required to carry out studies before and after completion.

#### VI. EXECUTING AGENCY AND EXECUTION STRUCTURE

6.1 The executing agency will be the IDB. SCT will have the technical responsibility for the implementation of the project, as well as responsibility for disbursement.

#### VII. MAJOR ISSUES

7.1 We do not foresee any major issues arising.

#### VIII. ACTION PLAN

8.1 The expected execution period for this TC is 3 years and 4 years for disbursement. The work plan is summarized below.

Activities	Semester 2008	Semester 2009		Semester 2010		Semester 2011
	II	I	II	I	II	I
Component I						
Design phase	X	X				
Launch and call for proposals		X				
Dissemination	X	X	X			
Selection of pilot projects			X			
Component II						
Research	X	X	X	X	X	X
Monitoring			X	X	X	X
Documentation	X	X	X	X	X	X
Dissemination of lessons learned			X	X	X	X

## IX. ENVIRONMENTAL AND SOCIAL STRATEGY

- 9.1 For its nature, this TC will not have any negative direct environmental or social impact, and is a category C project.

## X. APPROVAL

VoBo Original Firmado  
Carlos Guaipatín,  
Team Leader, SCL/SCT

Approval Original Firmado (7/15/2008)  
Gonzalo Rivas,  
Division Chief SCL/SCT

**ANNEX I**  
**ENABLING TECHNOLOGIES: INNOVATIONS FOR PEOPLE WITH DISABILITIES**  
**(RG-T1585)**

**LOGICAL FRAMEWORK**

Summary	Performance Indicators	Means of Verification	Assumptions
The general objective is to encourage the development of innovations that improve the lives of PWD in LAC, and increase their participation in education and the work force and their inclusion in the economic, political, and socio-cultural spheres of society. The specific objective is to support the development and piloting of five to ten pilot projects.	<p>After 36 Months of initiating the TC:</p> <p>At least 5 pilot projects with solutions to needs of the disabled have been executed.</p> <p>The Bank has obtained lessons on how to stimulate innovative solutions to needs of people with disabilities.</p> <p>Increased awareness of issues facing disabled people.</p>	<p>Final report</p> <p>Final evaluation study</p> <p>Final evaluation study</p>	<p>The interest in developing innovative applications to solve needs of PWDs is high; the interest of the organizations to cooperate is high.</p> <p>Participating national government show interest in the topic and willingness to promote the initiative.</p>
Component I: Competition/Call for Proposals	<p>After 6 months of initiating the TC, the design and dissemination of the competition has been developed together with disabled people's organizations</p> <p>After 18 months of initiating the TC, at least 5 PPs have been selected.</p>	<p>Webpage of the TC; agreements with organizations.</p> <p>Final report.</p>	The interest of the private sector and organizations in developing innovative applications to solve needs of PWDs is high.
Component II: Research, monitoring, documentation, and dissemination of lessons learned	<p>After 36 Months of initiating the TC:</p> <p>The execution of the PPs selected has concluded.</p> <p>A report with lessons learned has been prepared.</p> <p>At least one policy paper has been published.</p> <p>At least three seminars/workshops have been carried out.</p>	<p>Final report;</p> <p>Final evaluation</p> <p>Webpage of the TC.</p>	The interest of the firms and/or institutions that presented the PPs selected is maintained.



**ANNEX II. TERMS OF REFERENCE**  
**ENABLING TECHNOLOGIES: INNOVATIONS FOR PEOPLE WITH DISABILITIES**

**(RG-T1585)**

**INDIVIDUAL CONSULTANCIES: TECHNICAL SUPPORT**

**I. OBJECTIVES OF THE CONSULTANCY**

The objective of these consultancies is to provide technical support to specific activities of this TC.

**II. ACTIVITIES OF THE CONSULTANCY**

The consultant will be responsible for providing technical support to the following activities:

1. Preparation and diffusion of lessons learned.
2. Preparation of high quality products (papers, webpage, media, etc) that will be used in follow-up and dissemination.
3. Preparation of a communication strategy focused on national governments, private sector and organizations related to PWD.
4. Research on how to promote innovations that address the problems of the PWD.
5. Preparation of best practices on how to enhance partnerships with local organizations, municipalities, NGOs, and technology-based entrepreneurs
6. To raise awareness among member governments of how technology and innovation can help PWD.

**III. CHARACTERISTICS OF THE CONSULTANCY**

The consultant(s) should have publications and proven expertise in the field of social inclusion, preferably with people with disabilities. The consultant should also be familiar with organizations working in the region as well as the workings of the IADB. Some travel might be required.

Educational qualifications: Economics, communications, social sciences or related fields.

Languages: Fluency in English and Spanish

Nationals/citizens of all Bank's Member States are eligible for this consultancy.

**TERMS OF REFERENCE**  
**ENABLING TECHNOLOGIES: INNOVATIONS FOR PEOPLE WITH DISABILITIES**  
**(RG-T1585)**

**INDIVIDUAL CONSULTANCY: COORDINATOR**

**II. OBJECTIVES OF THE CONSULTANCY**

The objective of this consultancy is to carry out the day to day workings of the program and coordinate the activities that comprise the TC.

**II. ACTIVITIES OF THE CONSULTANCY**

The consultant will be responsible for the following tasks (and others that will be added):

1. Coordinate the initiative.
2. Steer the design phase
3. Head up the dissemination phase and the selection process (working closely with the organizations that are involved)
4. Manage the development of the website, the studies, and the reports
5. Conduct the monitoring and follow-up of the pilot projects through close contact with the project teams and frequent visits to the region.

This consultant will also work closely with the national governments that decide to participate in the initiative, consulting them on how to run a competition like this.

**III. CHARACTERISTICS OF THE CONSULTANCY**

The consultant should have publications and proven expertise in the field of social inclusion, preferably with people with disabilities. The consultant should also be familiar with organizations working in the region as well as the workings of the IADB. The consultant should have ample experience in international organizations.

Languages: Fluency in English and Spanish.

Educational requirements: M.A.

Nationals/citizens of all Bank's Member States are eligible for this consultancy.