



**Regional Fund for Digital Innovation in Latin
America and the Caribbean
– FRIDA Program –**

Execution Report

LACNIC

Montevideo, Uruguay
May 2006



Summary

This report covers the first two years of execution of the FRIDA Program (Regional Fund for Digital Innovation in Latin America and the Caribbean).

During these two years the “Digital Competitive Grants” project, origin of the FRIDA Program, was implemented, a project formulated by LACNIC jointly with the IDRC Pan Americas Initiative and the Institute for Connectivity in the Americas (ICA), both Canadian government organizations. This initiative was immediately joined by other important organizations such as the Internet Society (ISOC) and GKP; the important contributions made by these organizations greatly contributed to strengthen the FRIDA Program, both in relation to the number of projects it supports as well as to the instruments used for project selection and follow-up.

The FRIDA Program has the following objectives:

- To promote the development of regional research capabilities within the field of Information and Communication Technologies for Development;
- To promote the development of technical capabilities relating to the Internet and other technological applications;
- To promote digital inclusion;
- To strengthen and promote the Information Society within the countries of the region..

In order to fulfill these objectives, the strategy that was chosen and implemented during these past two years is the creation of a small grants competitive fund, with annual summons calling for investigation projects where the best proposals are selected based on criteria of excellence and agreement with the Project's objectives. These proposals may be annual or biannual, and they may receive grants of up to US\$ 12,500 or US\$ 25,000 respectively.

In response to the two calls that were made in March 2004 and January 2005, we received 122 and 357 proposals, respectively. In 2004, twelve projects were selected, while in 2005 fourteen projects were selected, projects that are currently under different stages of their execution, with an important number of projects that have already been completed (twelve). Appendixes I and II contain details on the projects that were selected together with their current status.

What has been done

The Project began its activities at the beginning of 2004, with the designation of the technical team, the analysis of the information that was available, and the development of basic documentation that would an adequate communication of the Program's purpose and goals (Bases, Summons, forms for presenting FRIDA Proposals, website).

This involved initially defining certain basic aspects such as applicant requirements, types of support, duration, subject matter and objectives of the projects, composition of the Evaluation Committee, and selection criteria.

The level of support that was initially committed allowed us to establish competitive annual summons aimed at organizations of the region, calling for two types of potential projects: Annual Projects which would receive funding of up to US\$ 12,500 and Biannual Projects which would receive up to US\$ 25,000.

Once the basic aspects of the program were established, mechanisms were generated that would allow broad access to information, both making the information available to all those interested

in obtaining it (website), as well as through other mechanisms such as the organizations' mailing lists and the media.

As a consequence of this, in response to the two calls that were made, a very large number of proposals were received from 19 and 21 different countries of the region, proposals that were analyzed considering their general aspects (formulation, relevance, origin), and later through the work of the Evaluation Committee whose members were responsible for establishing selection criteria and operational procedures.

The Evaluation Committee is a key component of the Program both because of its composition – members are proposed by all participating organizations (Appendix III) – and because it functions independently, barely moderated by FRIDA. The quality of the work carried out for the two calls that were processed, both individually as well as collectively, is a great indication that their appointment was a success, as the group represents a balance of interests, a profound knowledge of the regional reality, diverse approaches towards the field of ICTs, and an extremely high level of commitment to the FRIDA Program objectives.

After projects are selected, there follows a brief adjustment stage and the necessary fulfillment of the formal aspects of the process, such as signing agreements, presenting documentation, adjusting administrative aspects of the projects, all of which contribute to guarantee that the objectives of the research programs supported by FRIDA will be met.

Part of the commitments assumed by the projects when they receive funds from FRIDA is the obligation to present periodic execution reports, both technical (Progress Reports) as well as financial (Financial Execution Reports). These documents allow the coordinators to verify that programs are being adequately developed and the progress that has been achieved, and also detect potential problems in their execution. The adequate fulfillment of these requirements entitles the disbursement of funds. In addition, projects must present a final Technical and Financial Report, the approval of which is an essential requirement for receiving the final payment, which is equivalent to 20% of the total funds assigned to the project.

During 2005, because of the number of projects under execution, we brought on board the three professionals who make up the Follow-Up Committee. This Committee is responsible for analyzing progress and final technical reports, thus providing support to the coordinators. This group's relationship with FRIDA is similar to that of the Evaluation Committee; it is made up by Ester Kaufman of Argentina, Ida Holz of Uruguay and Fernando Beltrán of Colombia. The group brings together complementary technical and social approximations and points of view towards ICTs, which represent an invaluable element at the moment of performing the technical follow-up of the great variety of proposals that are executed.

During these past two years, both the Evaluation Committee and the Follow-Up Committee have assumed a relevant role in disseminating information and guaranteeing the quality of the Program, thus contributing to its strengthening.

Beginning in October 2005, with the completion of the first projects, the Program began a very relevant phase: that of disseminating results. The Final Reports have been published on FRIDA's website, and the existence of the results has been communicated through mailing lists. In parallel, a small sponsorship fund was created aimed at encouraging participation in relevant events for presenting the projects and contributing to spread the knowledge gained through the Program. This fund is already being implemented, promoting the participation of projects in events that will be held during next semester.

As to the disseminating information on the Program, numerous presentations have been made at different forums to which LACNIC has access. Additionally, information about the FRIDA

Program has been included in LACNIC's newsletter, and posters have been prepared and distributed at different events together with specific information sheets.

Within the framework of certain events, FRIDA BoFs have also been organized to allow more individuals to know about the existence of this Program.

All these promotional activities, both written and oral, include information on all the organizations that participate as Program contributors.

Budget and Financial Execution.

The following table describes the budget corresponding to the execution of the project during this first (Table 1).

Table 1. Contributions Committed to the FRIDA Program (2004 – 2005 biennium)

Organizations	US\$
Pan Americas / IDRC / ICA	225,000
LACNIC	75,000
ISOC	150,000
GKP	30,000
TOTAL	480,000

Table 2 summarizes the final allocation of funds, after the completion of the two calls.

Table 2. FRIDA Program Funds Distribution (as at April 30, 2006)

Nº	Description	Total US\$
2004 Calls		
4	Biannual Projects	99,837
8	Annual Projects	98,256
2005 Calls		
14	Annual Projects	173,909
	Selection Committee (2004 and 2005)	38,000
	Follow-Up	15,000
	Evaluation	4,000
	Disseminating Results (Forums, events)	16,870
	Overhead (7.11%)	34,128
TOTAL		480,000

Table 3 shows income and expenditures as at April 30, 2006.

Table 3. Statement of Cash Flows (US\$)

INCOME	473,356	EXPENDITURES	353,362
Dec.-03 ISOC	75,000	Payments to Projects	272,707
Feb.-04 1º IDRC and ICA	58,743	Evaluators	38,000
July-04 LACNIC	37,500	Follow-Up	9,000
Sept.-04 2º IDRC and ICA	59,615		
Dec.-04 LACNIC (2005 advance)	15,000		
Dec.-04 GKPS	29,970	Overhead (7.11%)	33,655
March-05 3er IDRC and ICA	49,707		
Aug.-05 4º IDRC and ICA	50,321		
Sept.-05 LACNIC	22,500		
Dec.-05 ISOC	75,000		
		ACCOUNT BALANCE	119,994

As detailed in Table 3, practically all the anticipated funds are already available in the project's budget (US\$ 473 thousand vs. US\$ 480 thousand). As to the financial execution, all 2004 projects have received their second payment (40%), the seven projects that were completed during the semester have received their final payment (20%) (ICD, IERAL and ESPOL), and all the projects selected in 2005 have received their initial payment (40%).

Likewise, the Follow-Up team has received their first payment (totaling US\$ 9000).

Between June and September the Program must make the final 20% payment (reimbursement) to all the projects. In addition, the Program must make the 4th and 5th payments to the Follow-Up Committee and pay the hiring of the Evaluation Consultant.

Finally, the funds assigned to spreading and disseminating information will also have to be mobilized; these funds shall be enabled through a closed summons aimed at FRIDA projects.

FRIDA Program's management is guided by the search for efficiency in the execution of funds and transparency in the relationships between the partners of the program, making sure at all times that the program's administrative costs are kept at a minimum and that the largest possible percentage of the funds are effectively used for funding projects.

Simple but robust accounting procedures, external management audits, and periodic reports are some of the mechanisms used for administrating available funds. They guarantee that the projects that are selected receive all the support that was committed.

Current Situation

The group of activities currently carried out by LACNIC for administrating the FRIDA Program focus on the following:

1. **Completing the projects that are under execution**, most of which will be completed before August 31, according to what was requested.

Of the 28 projects that were selected in both calls, 12 projects have already been finalized (See Appendixes I and II). In this sense, the Follow-Up Committee is making important efforts to review the progress and final reports that were presented, providing their cooperation so that information will be presented in a manner that best communicates the relevant elements of the work that was carried out and can be capitalized by the community as a whole. This also demands attention on the part of the Administration, as it requires comparing the project's financial execution reports with the approved budgets before final disbursements can be made.

2. **Sharing the Program's achievements**, mainly on the basis of the work carried out within the framework of the 28 projects that were executed during this first phase.

Because FRIDA is a regional program, it is necessary that the knowledge that is gained and the results that are achieved by the project's investigators be transmitted and be available to the rest of the community, thus expanding the Program's impact beyond the limited number of projects that are supported. This framework supports the idea of sponsoring groups to present their work at regional forums and for which the sponsorship fund has been created. In addition, it is anticipated that they will have direct participation in relevant forums both within the region and external to the region where the experience can be shared, thus broadening FRIDA awareness.

3. **FRIDA Program evaluation**, as a fundamental stage for objectively determining the results and impact of a regional Program.

The original formulation of the program included this component as a tool for verifying that objectives had been met and reviewing the means that were utilized. At the moment, this task is being processed by Dr. Sybil Caballero of Venezuela, who was appointed after conducting a public summons calling for consultants and receiving by more than fifty candidacies from our region. It is anticipated that preliminary information will be available by June 30, while the second and final report will be completed towards the end of September, once the majority of the projects are finalized.

4. **FRIDA Phase 2**. The concern detected in the region regarding the continuity of the Program speaks volumes of the relevance FRIDA has attained.

LACNIC has initiated contacts with certain organizations that could become contributors to the Program. These organizations include current contributors, with which there is naturally an interest in maintaining the relationship, although not necessarily maintaining the same level of contribution. LACNIC has decided to increase its contribution, therefore we are confident that other organizations will follow us in this change. Some of our current partners have already manifested their interest, subject to the incorporation of the knowledge acquired through the evaluation that is being carried out, which will be extremely valuable for formulating a new phase of the Program.

At the moment work is being carried out to analyze and evaluate the work that has been completed and to reestablish commitments that will provide continuity to the support generated in the region. LACNIC and the other organizations that constitute FRIDA share the challenge of developing a new phase, one with greater resources and better instruments aimed at increasing the number of countries and organizations directly or indirectly benefited by the Program; for this reason we are extending an invitation to all the organizations who share their objective.

Some Results

The execution of this first phase of the FRIDA Program, even before it is completely finalized, evidences results that are relevant for the region.

First of all, we have been able to verify the existence of an actual necessity in the region, and that the creation of FRIDA has at least partially satisfied this necessity. The growing number of proposals received by the Program, as well as the number of organizations and countries involved in these proposals, show how important it was to build this instrument for the region.

Second, the group of selected proposals— 28 in all – implies that, when this phase is completed, 372 thousand dollars will have been directly allocated to local investigation.

To summarize, we can mention the following achievements:

At Program level:

- The appearance of 479 initiatives originating from 21 different countries.
- 28 organizations from 12 different countries received support for the realization of their projects.
- Promoting research and the exchange of knowledge among different groups and countries of the region.
- Making available new funds, generally unavailable, for making innovation processes more dynamic at regional level.

At project level:

These funds have allowed developing local experiences in subjects as diverse as wireless connectivity, IPv6, e-learning, municipal management, robotics for children, social integration, promotion of employment, network and e-mail security, GRIDs, digital inclusion, medical diagnostics through images and rural training. These are just some of the topics and concerns that have been addressed, and now the results are available to the entire community.

Some Conclusions

- As mentioned earlier, FRIDA now occupies an important place within the region. Through this program, many regional organizations have had the opportunity of strengthening their ICTs investigation activities. The appearance of FRIDA has promoted the development of investigation programs within the region, a fact that has generated great expectations regarding the continuity of FRIDA.
- The program has been innovative in the sense of creating an unobtrusive and low-cost management process, one that allows most of the funds to actually be allocated to investigation projects and not be used to finance administrative bureaucracy.
- The FRIDA Program has achieved important popularity levels which are clearly evidenced by the larger number of applications received during the second year as compared to those received during the first year.
- The FRIDA Program contributes to the achievement of several of the goals included in the e-LAC 2007 Plan of Action for the Information Society in Latin American and

Caribbean, which was approved by the region's governments at the Regional Meeting held in the city of Rio de Janeiro in June 2005.

(<http://www.cepal.org/socinfo/noticias/documentosdetrabajo/5/21685/eLAC%202007%20English.pdf>)

APPENDIX I – 2004 Summons: Selected Projects

A) Social Innovation in the Use of New Technologies

Title: Digital Inclusion and Employment Policies.

Project Leader: Andrés Chamboleyron

Proposing Organization (PO): Instituto de Estudios sobre la Realidad Argentina y Latinoamericana (IERAL)

Country: Argentina

Duration: 12 months

FRIDA Support (US\$): 12,500

Situation as at Dec. 31, 2005: Finalized (Final Report available at http://programafrida.net/docs/informes/politicas_empleo_ieral.pdf).

Title: Appropriation of Information and Communication Technologies for Local Development in the Municipality of Libres Puebla, Mexico.

Project Leader: Yunuen Cecilia Manjarrez Martínez.

Proposing Organization (PO): Sistema de Información y Comunicación del Estado de Puebla

Country: Mexico

Duration: 12 months

FRIDA Support (US\$): 12,157

Situation as at Dec. 31, 2005: Finalized

http://programafrida.net/docs/informes/InformeFinal_SICOM_FRIDA.pdf

Title: Utilization and Appropriation of Information and Communication Techniques as an Efficient Means of Citizen Participation and Oriented towards Local Development in the Mining-Crafts Settlement of Cerro Lunar-Puno, Peru.

Project Leader: Alfonso Obando Mestas

Proposing Organization (PO): EKAMOLLE - Instituto para el Desarrollo Sustentable

Country: Peru

Duration: 12 months

FRIDA Support (US\$): 11,670

Situation as at Dec. 31, 2005: Finalized (Final Report under evaluation).

Title: Building a Methodology for Measuring the e-Preparation of Colombia's Municipalities.

Project Leader: José Luis Villaveces Cardoso

Proposing Organization (PO): Observatorio Colombiano de Ciencia y Tecnología

Country: Colombia

Duration: 12 months

FRIDA Support (US\$): 12,500

Situation as at Dec. 31, 2005: Finalized (Final Report available at <http://programafrida.net/docs/informes/ocyt.pdf>).

Title: New Technologies for Social Integration in Latin America.
Project Leader: Anabel Cruz
Proposing Organization (PO): Instituto de Comunicación y Desarrollo (ICD)
Country: Uruguay
Duration: 12 months
FRIDA Support (US\$): 12,000
Situation as at Dec. 31, 2005: Finalized (Final Report available at http://programafrida.net/docs/informes/tecnologias_informacion_comunicacion_lac.pdf)

B) Technical Innovation

Title: GRID Tools for the Integration and Administration of Network Services in Latin America.
Project Leader: Herbert Hoeger Zibauer
Proposing Organization (PO): Centro Nacional de Cálculo Científico – Universidad de los Andes (CeCalCULA)
Country: Venezuela
Duration: 12 months
FRIDA Support (US\$): 12,500
Situation as at Dec. 31, 2005: Finalized. Final Report available at http://programafrida.net/docs/informes/herramientas_grid.pdf

Title: PC for Youngsters (Scientific Principles for the Young).
Project Leader: Pedro Hepp
Proposing Organization (PO): Instituto de Informática Educativa Universidad de La Frontera
Country: Chile
Duration: 24 months
FRIDA Support (US\$): 25,000
Situation as at Dec. 31, 2005: Under Execution (3rd Technical Report presented on April 16, 2006).

Title: Risk Analysis and Management in Information Security.
Project Leader: Luiz Fernando Rust da Costa Carmo
Proposing Organization (PO): Programa de Pós-Graduação em Informática do DCC/IM - NCE da Universidade Federal do Rio de Janeiro
Country: Brazil
Duration: 24 months
FRIDA Support (US\$): 25,000
Situation as at Dec. 31, 2005: Under Execution (3rd Technical Report presented on April 12, 2006).

Title: Creative Construction Modules for Children and Youngsters Using Robotics
Project Leader: Ana Lourdes Acuña Zuñiga
Proposing Organization (PO): Fundación Omar Dengo (Costa Rica)
Country: Costa Rica
Duration: 24 months
FRIDA Support (US\$): 25,000
Situation as at Dec. 31, 2005: Under Execution (3rd Technical Report submitted on April 26, 2006).

Title: Communal Area Networks (CANs)
Project Leader: Enrique Peláez Jarrín
Proposing Organization (PO): Escuela Superior Politécnica del Litoral (ESPOL)
Country: Ecuador
Duration: 12 months
FRIDA Support (US\$): 12,490
Situation as at Dec. 31, 2005: Finalized
(<http://programafrida.net/docs/informes/aire-6.pdf/>)

Title: Education Network with Cultural Quality
Project Leader: Regina Motz
Proposing Organization (PO): Facultad de Ingeniería, Universidad de la República
Country: Uruguay
Duration: 24 months
FRIDA Support (US\$): 24,837
Situation as at Dec. 31, 2005: Under Execution (Intermediate Report submitted on November 5, 2005).

Title: AIRE 6: "Wireless Access with IPv6 Networks"
Project Leader: Christian Alexis Lazo Ramírez
Proposing Organization (PO): Universidad Austral de Chile
Country: Chile
Duration: 12 months
FRIDA Support (US\$): 12,500
Situation as at Dec. 31, 2005: Finalized (Final Report available at <http://programafrida.net/docs/informes/aire-6.pdf>)

APPENDIX II - 2005 Summons: Selected Projects

A) Social Innovation in the Use of New Technologies

Title: Access to Sexual and Reproductive Health Information through Digital Communication.

Project Leader: Promoción y Mejoramiento de la Salud (PROMESA)

Proposing Organization (PO): Patricia Aguilar

Country: Paraguay

Duration: 12 months

FRIDA Support (US\$): 12,500

Situation as at Dec. 31, 2005: Finalized. Final Report under evaluation.

Title: Introduction of the Popular Education Perspective in Preparing Material for ICT Training for Social Development.

Project Leader: Arturo Danilo Lujambio

Proposing Organization (PO): Asociación Civil Nodo Tau

Country: Argentina

Duration: 12 months

FRIDA Support (US\$): 12,340

Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report submitted.

Title: Network for the Progress of Productivity and Improving Employment (PROMES Network)

Project Leader: Osvaldo Nina

Proposing Organization (PO): Centro de Investigación y Asesoramiento Social y Económico

Country: Bolivia

Duration: 12 months

FRIDA Support (US\$): 12,500

Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report submitted.

Title: Development of Local Capabilities for a Better Territorial Management in the Municipality of Las Sabanas.

Project Leader: Jairo Paizano P

Proposing Organization (PO): Acción Contra el Hambre

Country: Nicaragua

Duration: 12 months

FRIDA Support (US\$): 12,496

Situation as at Dec. 31, 2005: Finalized, Final Report under evaluation.

http://programafrida.net/docs/informes/Informe_final_Nicaragua.pdf

Title: Study of the Impact of Incorporating ICTs in Dairy Extension Programs in Latin America.

Project Leader: Ariel Londinsky

Proposing Organization (PO): Federación Panamericana de Lechería - FEPALE

Country: Uruguay - Regional

Duration: 12 months

FRIDA Support (US\$): 11,800

Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report submitted.

Title: Use of ICTs by Teachers Using the Eduteka Portal.

Project Leader: Enrique Rodríguez Caporali

Proposing Organization (PO): Universidad ICESI

Country: Colombia

Duration: 12 months

FRIDA Support (US\$): 12,429

Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report Submitted.

Title: Technical-Social Networks and Democratic City Management.

Project Leader: Tamara Tania Cohen Egler

Proposing Organization (PO): Instituto de Pesquisa e Planejamento Urbano e Regional

Country: Brazil - Mexico

Duration: 12 months

FRIDA Support (US\$): 12,500

Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report Submitted.

B) Technical Innovation

Title: IPv6 Implementation and Development in Nicaragua (ID6).

Project Leader: José Roberto Blandino Obando

Proposing Organization (PO): Universidad Nacional Agraria – Red Nicaragüense de Internet Avanzada (RENIA).

Country: Nicaragua

Duration: 12 months

FRIDA Support (US\$): 12,440

Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report Submitted.

Title: Security in Communications: Quality Platform in E-Mail Service.

Project Leader: Claudia Inostroza Mardones

Proposing Organization (PO): Red Universitaria Nacional - REUNA

Country: Argentina - Chile

Duration: 12 months

FRIDA Support (US\$): 12,404

Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report Submitted.

Title: Classification of Free Educational Software.
Project Leader: José Eduardo de Lucca
Proposing Organization (PO): Fundação de Ensino e Engenharia de Santa Catarina
Country: Brazil
Duration: 12 months
FRIDA Support (US\$): 12,500
Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report Submitted.

Title: Timely Identification of Impostor Attacks.
Project Leader: Raúl Monroy Borja
Proposing Organization (PO): Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Estado de México (ITESM)
Country: Mexico
Duration: 12 months
FRIDA Support (US\$): 12,500
Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report Submitted.

Title: Development of Java Plugin for Tomographic Reconstruction and Visualization in Nuclear Medicine.
Project Leader: Ana Maria Marques Da Silva
Proposing Organization (PO): Pontifícia Universidade Católica do Rio Grande do Sul
Country: Brazil
Duration: 12 months
FRIDA Support (US\$): 12.500
Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report Submitted.

Title: Social Connectivity Pilot Project (Commune, Hospital, Schools, Small Businesses, Libraries) in Rural Areas and Small Cities in Argentinean Territory under Communication Platforms (SAT/WMAN – WLAN/PC).
Project Leader: Miguel L. Guillaumet
Proposing Organization (PO): Fundación Era Digital
Country: Argentina
Duration: 12 months
FRIDA Support (US\$): 12,500
Situation as at Dec. 31, 2005: Under execution, Six-Month Progress Report Submitted.

C) Regulations and Public Policies

Title: Effective, Equal-Opportunity Access to Broadcasting for Rural and Marginal Urban Communities, Key Strategy for Digital Inclusion in Latin America and the Caribbean.

Project Leader: Gustavo Gómez

Proposing Organization (PO): AMARC-ALC

Country: Uruguay – Regional

Duration: 12 months

FRIDA Support (US\$): 12,500

Situation as at Dec. 31, 2005: Under execution. Progress Report submitted.

APPENDIX III – Members of the Selection Committee

Evaluator	Country	Summons
Fabio Marinho	Brazil	2004, 2005
Teresa Silva (Uca)	Chile	2004, 2005
Magaly Zúñiga	Costa Rica	2005
Judith Mariscal	Mexico	2004, 2005
José Soriano	Peru	2004, 2005
Ida Holz	Uruguay	2004, 2005
Edmundo Vitale	Venezuela	2004, 2005