

**INTER-AMERICAN DEVELOPMENT BANK
SUSTAINABLE DEVELOPMENT DEPARTMENT
INFORMATION TECHNOLOGY FOR DEVELOPMENT DIVISION
(SDS/ICT)**

**IV SPATIAL CONFERENCE OF THE AMERICAS
“SPATIAL, SCIENCE AND TECHNOLOGY APPLICATIONS IN THE AMERICAS
AND THEIR BENEFITS FOR CIVIL SOCIETY”**

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**“Financing and Regional Cooperation Strategy of the Inter-American Development Bank
for Geospatial Technologies”**

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I. BACKGROUND

**A. Inter-American Development Bank: Information and Communication Technology
for Development Strategy**

- 1.1 During April 1999, the Bank approved Operational Policy “Information Age Technologies and Development” (OP-711). This statement establishes the Bank’s strategy, objectives and operating policy in the emerging area of information and communication technology (ICT), as a major factor in the future of social and economic development and growth of the Region. The document establishes, among others, the following areas of action for the Bank: (a) support national efforts in the definition, implementation and development of ICT; (b) support the establishment of regulatory and policy frameworks for the ICT sector in the Region; (c) analyze the Region’s ICT infrastructure needs; (d) support national ICT infrastructure investment planning; and (e) provide financial/lending support for the implementation of ICT to enhance the social and economic development process of the countries of the Region, and improving the access to public services by the population.

B. The Information and Communication Technology for Development Division

- 1.2 The Information Technology for Development Division (SDS/ICT), formerly, the Information Technology for Development Unit (IDU) was created in January, 1999 to enhance the capacity of the Bank to reinforce the economic, social and political reforms in borrowing member countries, by promoting innovative applications of ICT towards an equitable and sustainable development of the Region. The Division’s main functions include: (a) provision of technical backstopping to the Bank in the identification and formulation of ICT projects and program components; (b) provision of strategic and technical advice on use of information management technologies; (c) establishment of cooperation and co financing agreements with other agencies and organizations; (d) promotion of linkages with public and private institutions of the Region to support applied research and the implementation of pilot projects related to the utilization of ICT; and (e) preparation of strategic analyses of needs, priorities and opportunities in borrowing member countries.

- 1.3 Based on such mandate and objectives, the Bank, through the ICT Division, supports its borrowing member countries of the Latin American and Caribbean (LAC) Region in accomplishing a more efficient, equitable and sustainable development as a result of the execution of various programs based on information and communication technologies.
- 1.4 The Division concentrates its actions in three main action areas including:
- (a) human capital development aimed at empowering the use of ICT towards the strengthening and development of human resources through a lifelong learning process;
 - (b) digital democracy which entails the utilization of ICT tools and applications to improve the efficiency, transparency, accountability and reach of public sector administration and services (e-governance); and
 - (c) new economy aimed at contributing to the insertion of the Region to the new knowledge economy and the new transactions mechanisms as means to create wealth and distribute it equally.

II. INTER-INSTITUTIONAL COOPERATION AND COFINANCING STRATEGY

- 2.1 The information and communication technology inter-institutional and co financing strategy of the Bank consists of seeking avenues of cooperation with international organizations, civil society institutions and private sector enterprises to leverage the technical and financial resources available to promote the use and implementation of information and communication technologies in the Region.
- 2.2 Since its inception in January, 1999, SDS/ICT has established important cooperation agreements with, among others, the Information Society Technologies Program (IST) of the European Commission (EC), the International Telecommunications Union (ITU), the Food and Agriculture Organization of the United Nations (FAO), the International Labor Organization (ILO), and the 'Hispanic-American Association of Research Centers and Telecommunications Enterprises (AHCJET). Based on the Bank's information and communication technology strategy, these agreements allow today for the joint implementation and co funding of information technology pilot projects, and the undertaking of diffusion and dissemination and training activities in the borrowing member countries of the Region. Also, the Division continues to bring together these players and leverage a joint contribution to the development and implementation of information and communication technology strategies by the governments and stakeholders of the member countries of the Region.
- 2.3 The inter-institutional cooperation efforts of the Bank with the EC in ICT for development comprise:
- (d) the implementation of the regional technical cooperation "Pilot Program for the Diffusion of Information Technologies in Social Programs", which represents the first joint effort of the IDB--through SDS/ICT--and the EC--through IST--, in the area of ICT for development in Latin America and the Caribbean (LAC). The objective of the Program to encourage the use and application of ICT in social development projects by civil society organizations and public institutions, to the

extent that such technologies may contribute to greater efficiency in the attainment of their poverty reduction and social equity goals;

- (e) the approval of a memorandum of understanding (MOU) which seeks to reinforce the partnership between the Bank and the EC, and to deepen and extend their current inter-institutional cooperation towards the development of the LAC Region. Such collaboration will take place in the following shared priority areas: (i) consolidation of democracy; (ii) social equity and poverty reduction; (iii) regional integration; and (iv) development of information technologies and shared knowledge society; and
- (f) the immediate future implementation of joint actions in ICT for development within the framework of the recently launched Alliance for the Information Society (@LIS) Program which is aimed at: (i) stimulating dialogue and collaboration between LAC and European institutions in information society technologies, digital divide and ICT for social and economic development; (ii) technology and knowledge transfer between the two regions; (iii) establishment of educational and regional training networks; and (iv) design and execution of joint pilot and demonstrative projects, strategies for the information society, and financing under non-reimbursable conditions.

2.4 It is important to note that the @LIS Program was launched by the EC under the Spanish Presidency in Seville, Spain in April, 2002 during the “II Meeting of Ibero-American Ministries of Information Society” and “Ministerial Meeting Europe-Latin America and the Caribbean on Information Society”. During the events, the IDB was identified as a focal point for facilitating the implementation of the Program in the countries of the Latin American Region, and the natural partner to undertake the above-mentioned activities, with the active participation of the governments and civil society of the Region.

2.5 Also, the Bank will establish a co funding grant arrangement with the Institute for the Connectivity of the Americas (ICA) of Canada in order to undertake a series of investment and demonstrative activities in ICT for social development in the Region, and as part of the responsibilities that emanated from the Summit of the Americas of Quebec City in April, 2001, where the connectivity agenda of the Bank was presented.

III. SUSTAINABLE DEVELOPMENT AND THE BANK’S EXPERIENCE IN THE USE OF GEOSPATIAL TECHNOLOGIES

A. Strategy and Experience

- 3.1 The Bank’s sustainable development strategy is aimed at contributing to the efforts of its borrowing member countries of the Region to attain a sustainable use of the environment and their natural resources endowment, by providing the technical and financial instruments necessary to achieve such goals and objectives in the short, medium and long term.
- 3.2 This commitment has been reflected in various projects financed and implemented in different countries of the Region which have incorporated the use of information/geospatial technologies as main instruments to achieve the desired development results. The most dominant areas have involved technical cooperation and

loan operations in natural resources management, land use evaluation and planning, meteorological monitoring and natural disaster management. In particular, concrete examples of projects or components of projects include: (a) zoning, land titling and cadastre modernization systems; (b) remote sensor systems for natural disaster prevention and management and meteorological monitoring systems; (c) marine and coastal resources management systems; (d) natural resources evaluation through the use of remote sensing techniques; (d) national and regional digital mapping and geographic information systems; (e) geographic information systems applications for transport and highway decision support systems; and (f) remote sensing systems for watershed evaluation and management.

3.3 Also, the Bank has executed technical cooperation operations which involved the design and utilization of vsatellite (V-Sat) telecommunications technologies for general and environmental distance education programs as means to reach the most marginalized and geographically distant populations of the Region.

3.4 The combination of information and space technologies are seen as viable instruments to narrow the information gap and, if adequately implemented, can represent cost effective instruments for poverty reduction purposes in the Region. It is desirable that such applications can be easily replicated throughout the member countries and, thereby, allow for financial and technical economies of scale at the regional level. Also, it is of extreme importance for the countries of the Region to benefit from intra and extra-regional technology and knowledge transfer and seek for inter-institutional cooperation at the regional, national and local levels to make the most optimal use of the limited resources available.

IV. APPLICABLE FINANCIAL INSTRUMENTS OF THE BANK TO SUPPORT ICT FOR DEVELOPMENT AND GEOSPATIAL TECHNOLOGIES

A. Lending and Technical Cooperation Instruments

4.1 The above-mentioned cooperation and co financing programs are implemented in conjunction and/or linked to the Bank's existing financing mechanisms including: (a) the technical cooperation program with non-reimbursable donor/trust fund financing (CT-Funds); (b) the regional technical cooperation program (CTR) with non-reimbursable resources from the Fund for Special Operations (FSO); and (c) the lending program (Fund for Special Operations--FSO--and ordinary capital).

4.2 Also, the recent approval of new financing instruments by the Board of the Bank will expedite and facilitate the incorporation and financing of rapidly emerging information and geospatial technologies in development projects in the Region. These include innovation loans, multi-phased loan facilities, sector facilities, and project preparation and execution facilities. On one hand, these instruments allow to accelerate the loan evaluation and approval processes and, on the other hand, they facilitate the gradual incorporation of new technologies to the investment programs in the Region.

4.3 In particular, three of the four facilities have the most relevance in the ICT and geospatial technologies: (a) the innovation loans which facilitate the execution of projects that involve the agile use of the emerging technologies and development instruments and whose results can be replicated in other development programs of the Bank; (b) the sector

facilities which promote the use of efficient, but low cost technologies that can contribute to a higher social impact of the Bank's development programs; and (c) the project preparation and execution facilities which will contribute to strengthen the initial project design and implementation activities and, most of all, ensure an efficient start up of development projects and a quick access to proposed complementary information technologies.

- 4.4 Finally, a new information and communication technology line of credit will be evaluated which, based on individual agreements between the Bank and its borrowing member countries on strategic action lines and technical and financial criteria, should allow for even more agile and simplified disbursement procedures for projects involving these emerging technologies.

B. Initiatives in ICT Financing

- 4.5 The Bank has initiated the design of an "Information and Communication Technology for Development Fund" to finance a series of studies and activities which will allow the Bank to identify the real needs and demand for ICT systems, applications and infrastructure (i.e. telecommunications, information systems, computer applications and other), including their specific application to, among others, the social and environmental sectors and public sector administration in the member countries of the Region. These studies should provide the elements necessary for the Bank and its donors to assess future credit and technical assistance operations in the area of ICT for social development and, thereby, respond, in an efficient manner, to the growing financing demand from member countries in this emerging area.
- 4.6 Also, it is the objective of the Fund to finance a series of investment activities including project preparation and the execution of small, innovative and demonstrative pilot projects that make use of ICT as main instruments to contribute to, among others, social development, poverty reduction and to the efficiency of the public sector in the countries of the Latin American and Caribbean Region. The operation aims to finance such pre-investment and investment activities in the entire Region, with possible initial emphasis in the lower income member countries. Thereby, a wide scope and reach of activities across the Bank's three operations regions is expected.
- 4.7 The "Fund" will consist of a series of individual donor trust funds to be administered by the Bank under technical cooperation procedures. The initiative will be financed with the initial contribution of the Government of Italy and the future adherence of other bilateral donors. The Fund will effectively target ICT for social development, poverty reduction and e-governance--as established during the Palermo "E-Government for Development Conference" in April 2002--. It is expected that the Fund will be officially launched prior to the Board of Governors Meeting of the Bank in Milan, Italy in March 2003, where e-government aspects will be specifically addressed.
- 4.8 Finally, the Bank will place the efforts necessary for the extension of the "Pilot Program for the Diffusion of Information Technologies in Social Programs" and will continue mobilizing donor trust fund resources to facilitate the access of the countries of the Region to new emerging ICT/geospatial solutions to sustainable development.

**V. PROPOSAL OF THE BANK WITHIN THE FRAMEWORK OF THE
“IV SPATIAL CONFERENCE OF THE AMERICAS”**

- 5.1 The following concrete actions are proposed by the Bank to accelerate and intensify the effective incorporation of geospatial technologies by the countries of the LAC Region as effective solutions to a sustainable and equitable development process.
- (a) identification, design and implementation of cooperation arrangements between the IDB, the European Space Agency (ESA) and the Office for Outer Space Affairs (OOSA) of United Nations as means to facilitate the access to geospatial solutions by LAC countries;
 - (b) design and execution of joint financial and non-financial operations as means for the implementation of pilot and demonstrative projects, best practices and dissemination activities;
 - (c) identify the most appropriate mechanisms for joint technology and financial transfer to the Region;
 - (d) establishment of a plan of action for geospatial technology development activities in selected countries of the Region;
 - (e) selection of pilot countries for the implementation of technical cooperation activities in this area with government and civil society participation; and
 - (f) identification of bilateral, multilateral and civil society partners to leverage the overall contribution, reach and impact of geospatial technologies in the Region.