

TELECOMMUNICATIONS REFORM AND ELECTRONIC COMMERCE: ACTIVITIES OF THE WORLD BANK GROUP

INTRODUCTION

In pursuing its mission of poverty alleviation, the World Bank Group focuses on the opportunities of the information age for developing countries and economies in transition, with the objective of fostering growth and competitiveness and extending the sphere of economic activity to excluded groups.

Specifically, the World Bank Group:

- supports efforts to build public institutions' capacity to conceive and implement both the policies for information-based economic activities, including electronic commerce, and the infrastructure (physical and human) to support them;
- extends access to information and communications by those who are denied or cannot afford them, with a special focus on the poor and those living in rural areas;
- mobilizes resources and expertise, primarily from the private sector, for the information infrastructure in general, and telecommunications in particular.

POLICIES

Scope

The World Bank Group supports efforts by governments to develop information-based economic activities and the required information infrastructure.

These efforts involve: the development of sector policies, with a view to make them more responsive to coherent national development priorities; support to the provision of new communication services, including mobile voice telephony and Internet, which can compensate for the inadequacies of existing networks; and the policy setting process that requires interaction with a much wider range of public and private stakeholders.

This paper has been prepared by a joint team drawn from the Telecommunications and Informatics Unit (EMTTI), and the Information for Development Program, *infoDev* (EMTIN). It was developed as background information for the OECD Forum "Electronic Commerce: Convergence of Stakeholder Interests," Paris, October 12-13, 1999. For further information, please contact Carlos P. Braga (EMTIN) and Emmanuel Forestier (EMTTI).

Access

In developing countries, the effects of limited access may hamper the potential for development offered by electronic commerce, especially in regions such as rural areas, which have penetration rates much lower than the national rates, and for poor communities.

Where possible, the World Bank Group supports new solutions entailing specific strategies to improve access, especially through the involvement of the private sector in management and financing of electronic commerce solutions, and through an appropriate regulatory environment.

A special emphasis is placed upon finding commercial solutions that may benefit the rural and urban poor. As communal rather than individual access may be a preferred solution in many instances, the World Bank Group promotes the development of regulatory rules that may encourage the provision of such services and the active involvement of the affected communities.

Tariffs and Subsidies

In the area of tariffs, the World Bank Group encourages a larger use of cost-based retail tariffs by existing fixed operators, balanced when necessary by special arrangements for the groups whose access is threatened by new regimes, and liberal tariff regimes in a competitive sector structure for all new service providers.

Special attention is paid to interconnection rates in cases where dominant operators may fight the emergence of competing players. Special mechanisms (for example, involving subsidies) may be supported to facilitate access by communities that would otherwise be disadvantaged. However, any such subsidies must be competition-neutral, must enhance rather than displace the private-led provision of service, must effectively reach their intended beneficiaries, must be transparent and sustainable.

Mobilization of Resources

The World Bank Group encourages private investment in the area of development and implementation of commercial transactions (privatization and new licenses) designed to support overall sector policies and electronic commerce in particular.

Resources can flow in most efficiently if services are unbundled, new entry and tariff setting are liberalized, and pro-competition interconnection arrangements are enforced. This is of special significance in instances where growth is constrained by poor interconnection arrangements, the environment for private sector development is weak, and national fixed networks are obsolete.

Any public financial intervention should be designed to leverage private investment (for example, through appropriate risk sharing arrangements) and should be directed to areas of development otherwise unattractive for private financing. These may include high-risk countries and high-risk areas or market segments within countries (e.g., rural communications).

WORK STRATEGY

Lately the World Bank Group is facing increased demand for operational and advisory support in the telecommunications sector. In response, the World Bank has changed the focus and nature of the support it provides to the sector: the Telecommunications and Informatics Unit now reflects the new telecommunications policy and the increasing emphasis on the role of information in development; closer working arrangements with the IFC's telecommunications division have improved World Bank Group coordination; the Information for Development (*infoDev*) Program has been established in 1995 as a new grant facility managed by the World Bank and dedicated solely to information and communication technology-related activities. *infoDev* operates as a clearinghouse for 21 external donors and represents a valuable addition to the World Bank's traditional range of financial instruments.

	Structural or Sectoral Adjustment Operation	Sector Investment Loan	Technical Assistance	Economic and Sector Work	Guarantee	infoDev & other Trust Funds	IFC (1)	MIGA (2)
Awareness-raising, dialogue			✓	✓		✓	✓(3)	✓(3)
Policy changes	✓		✓	✓		✓		
Capacity building (4)			✓	✓	✓	✓		
Resource mobilization (5)		✓			✓		✓	✓
Strategic information systems		✓	✓			✓	✓(6)	
Pilot projects			✓			✓		

(1) IFC has a range of loan, equity, and guarantee financial instruments. In certain circumstances, it makes pre-privatization equity investments in telecommunications operators. It also provides financial advisory services.

(2) MIGA guarantees cover risks of transfer restriction, expropriation, breach of contract, war and civil disturbance for qualified investments in developing member countries.

(3) On issues associated with private investment in the sector

(4) Capacity on policy formulation and implementation, regulation, and designing and implementing transactions to attract investment

(5) Group financing to come in the first instance from IFC and MIGA. IBRD/IDA as financier of last resort in the context of an appropriately dimensioned partnership between the public and private sectors in higher risk environments. Guarantees are preferred to loans/credits.

(6) Where the strategic information system is private sector-led

Through Technical Assistance and Economic and Sector Work instruments, as well as via *infoDev* grants, the World Bank supports awareness-raising activities, policy dialogue and advice, development of regulatory capacity, and assistance in the design and implementation of transactions designed to promote competition and attract private investment to the electronic commerce arena.

Investment financing currently comes in the first instance from IFC. The International Finance Corporation may also advise on the impact of policy and regulatory arrangements, and on prospects for attracting investment to the e-commerce sector.

IBRD/IDA's investment financing may be used when it is clearly required to catalyze privately led solutions.

Technical Assistance

Typically, the World Bank assistance is part of a larger project related to telecommunications sector development, multi-sectoral parastatal reform, or multi-sectoral capacity building. Examples of activities supported through World Bank's Technical Assistance follow:

- Development of sector reform policies and plans;
- Development of modern communications legislation which (among other items) establishes a regulatory agency and facilitate electronic commerce;
- Development of regulatory frameworks and detailed licenses for telecom operators;
- Development of price re-balancing and price control arrangements;
- Development of universal service policies, plans, and network "roll-out" obligations;
- Design and implementation of plans to modernize radio-spectrum management;
- Advisory services, training and other form of capacity building for regulatory agencies;
- Development of agendas, procedural processes and rules, and organization structures for regulatory agencies;
- Support to multilateral liberalization efforts and compliance with the WTO's Reference Paper.

***infoDev* Grants**

Technical assistance on electronic commerce issues is also provided through *infoDev* grants. The *Information for Development Program (infoDev)* is a global grant facility funded by public and private donors and managed by the World Bank.

infoDev activities include sharing worldwide experiences on the economic development potential of communications and information systems. *infoDev* disseminates best practices to governments and to public and private key decision-makers. It also channels to governments in developing economies policy advice and other technical assistance regarding electronic commerce, private entry and competition in the communications and information sector, as well as on the improvement of policy, regulatory and business environment for investment.

ELECTRONIC COMMERCE

In the area of electronic commerce, the World Bank Group supports programs to promote regulatory reform, market access, enhancements of the information infrastructure and the increased participation of excluded groups.

The following list is indicative of electronic commerce activities that are either in the portfolio of the World Bank/infoDev or in the pipeline. This list is not exhaustive or comprehensive, but rather is intended to provide some meaningful examples. In what follows, “ecommerce”-related activities are classified according to the taxonomy used by OECD in its ecommerce forum documents.

ESTABLISHING GROUND RULES FOR THE DIGITAL MARKETPLACE

Commercial Law

World Bank/infoDev – Existing Activities

- India - Conference and workshops on global electronic commerce, in cooperation with the Global Information Infrastructure Commission and the Confederation of Indian Industry- The opportunities and constraints of electronic commerce were illustrated to representatives from the private sector, the legal community, banks and financial institutions, and Indian policy makers. The workshops also served to create a group who will work closely with national and international organizations to foster a harmonized legal and regulatory environment for global electronic commerce.

Trade Facilitation And Market Access

World Bank – Existing Activities

- Bangladesh - Promotion of private investments, operations and competition in the provision of telecommunications services.
- Bolivia - Enhancement of the legal and regulatory framework for infrastructure and business through the reform of public-service cooperatives.
- Cameroon - Separation of the policy, regulatory and operational functions in the telecommunications sector.
- Chad - To improve the quantity, quality and cost-efficiency of communications services, and the level of access to these services, particularly in rural areas. To design strategies for national access and for private participation in provision of services.
- Dominican Republic - Strengthening the policy and regulatory environment in the telecommunications sector and improvement of rural access by encouraging private telecommunications network in under-served rural areas.
- Indonesia - Extension of communications and information networks to facilitate sustainable regional development and economic growth through E-mail, Internet and tourism information services, and through new value added services using existing postal and electronic networks.

- Malawi - Elaboration of key policies, establishment of appropriate regulatory arrangements for the sector and of a plan to improve rural communications.
- Mali and Mauritania - To increase access to telecommunications service, widen the range of services, move telecommunications tariffs towards a cost-oriented structure, help the deployment of new and cost effective technologies by attracting private commercial and technical management and expertise.

World Bank – Future Work

- Extension of Technical Assistance to other countries in regulatory reform to promote information infrastructure development.

infoDev – Existing Activities

- Dissemination of best practices and lessons learned with regard to liberalization of markets, development of network infrastructures, global connectivity and convergence, etc.
- Linking poor producers to global markets. This project gauged the capacity of grass roots NGOs to benefit poor artisans all over the world through E-commerce. It focused on the ability of craft-exporting NGOs to communicate and conduct business electronically, and detailed the equipment and training activities adequate for participation in E-commerce.
- Funding of a study on Regulatory Issues in Electronic Commerce (in co-operation with ITU). The report provided background information and key issues for consideration by the members of the 8th ITU Regulatory Colloquium (Geneva, December 1998) on the subject of "Regulatory Issues for Electronic Commerce". The document reviews the opportunities that electronic commerce presents, and the issues that regulators must confront to support its expansion.

infoDev – Future Work

- Continued awareness raising seminars and dissemination of results and best practices
- Cameroon - Regional meeting on business and information technology. A regional meeting of local entrepreneurs will be carried out in Douala, to help them address the region's business weaknesses in its capacity to use effectively Information Technologies and E-commerce. The meeting will be accompanied by workshops on the same subject for women entrepreneurs.
- Group of 77/China - Workshops for the Trade Information Network of the Chambers of Commerce and Industry and Assimilated Institutions of the UN - Activities will focus on capacity building, to facilitate the emergence of the Chambers' new role as information brokers, and on the enhancement of their Internet proficiency.
- Uganda and Tanzania - Accelerating Electronic Commerce. The project will twin 10 local small start-ups with experienced e-commerce non-profit enterprises in western countries for training and assistance purposes, thus creating a unique opportunity for developing Internet-based business in Uganda and Tanzania to compete effectively with foreign enterprises in the rapidly developing E-commerce arena.

Intellectual Property

World Bank – Current Activities

- Hosting of TechNet seminars and discussion groups on promoting and strengthening Intellectual Property Rights protection in developing countries.

World Bank – Future Work

- Cooperation with International Chambers of Commerce and WIPO in disseminating information on IPRs protection in cyberspace.

ENHANCING THE INFORMATION INFRASTRUCTURE FOR ELECTRONIC COMMERCE

Access To And Use Of The Information Infrastructure

World Bank – Current Activities

- Operations encouraging sector development, as detailed in the "Trade Facilitation and Market Access" chapter above, include funding for information and communication infrastructure development and funding for legal and regulatory reform, promoting, inter alia, fair and transparent regulation in a competitive environment, investor and user confidence, affordable, cost-based services, private sector participation in the introduction of new services, universal access to service.
- Dissemination of experience, good practice and knowledge through publications, participation in international fora and co-operation with other international institutions such as ITU, UNCITRAL and WTO.
- Workshop on Information and Communication Technology in Rural Development in India (March 1999). Among the topics of the seminars, a special importance was given to the empowerment of citizens through access to information.

World Bank – Future Work

- Continue operations focus in developing markets on legal and regulatory reform encouraging sector development including new technologies and applications.
- Continue knowledge dissemination and co-operation with other international institutions.
- Publication by the World Bank Institute of the Proceedings on the Workshop on Information and Communication Technology in Rural Development in India.

infoDev – Current Activities

- Development of tool-kit containing cost-benefit analysis and case studies demonstrating the rationale for liberalizing Internet services.
- Dissemination of best practices and lessons learned with regard to liberalization of markets, development of network infrastructures, global connectivity, convergence, etc.

- Establishment and enhancement of electronic communication networks and information support services.

infoDev – Future Work

- Continued awareness raising seminars and dissemination of best practices.

THE YEAR 2000 PROBLEM

World Bank – Current Activities

- Loans, amounting to more than \$160 million, to several beneficiary countries (e.g., Argentina, Malaysia, Sri Lanka).

World Bank – Future Work

- Provision of loans on demand for recovery activities.

infoDev – Current Activities

Y2K Initiative

- Organization and financing of 18 regional and national seminars to deepen understanding of the Y2K problem, share information and best practices and create networks for technical & professional co-operation. More than 1,500 people from 120 countries participated.
- Provision of 103 grants to assist governments in the design of national plans and the implementation of remediation activities.
- Support to the International Y2K Cooperation Center for information sharing on Y2K readiness at international level.

infoDev – Future Work

- *infoDev* is focusing on contingency planning in high-risk sectors, including cross-border concerns.
- Implementation of Y2K grants and technical assistance for recovery activities.

MAXIMIZING THE BENEFITS

Economic And Social Impact

World Bank/infoDev – Current Activities

- Provide assistance to countries in the design and implementation of regulations to liberalize their telecommunications markets—highlighting how enhanced information infrastructure can benefit economic and social development.

World Bank/infoDev – Future Work

- Continue to provide grants that promote economic and social development through ICT applications
- November 99 *infoDev* Symposiums on the Networked Economy.
- Information Infrastructure Indicators, 1990-2010 - *infoDev* is financing the construction of a comprehensive set of economic and technological indicators to gauge and track the evolution of the Information Infrastructure.
- Characterizing the Challenges and Opportunities Arising from the Networking Revolution in the Developing World - The project will develop a range of feasible scenarios for the evolution of communications infrastructure and services, and the evolving effect of communications on economic and social development.

SMALL AND MEDIUM SIZED ENTERPRISES

World Bank/infoDev – Current Activities

- TechNet seminars and discussion groups on the practical applications for electronic commerce systems in emerging economies.
- Development of tool-kit outlining procedures necessary to increase grass-roots participation in Internet commerce.
- Stimulate private entrepreneurship at the micro-level by funding the development of a business plan for the establishment and operation of information service centers.

World Bank/infoDev – Future Work

- Dissemination of lessons learned.
- Funding of projects and provision of technical assistance.
- Uganda and Tanzania - Accelerating Electronic Commerce. The project will twin 10 local small start-ups with experienced e-commerce non-profit enterprises in western countries for training and assistance purposes, thus creating a unique opportunity for developing Internet-based business in Uganda and Tanzania to compete effectively with foreign enterprises in the rapidly developing E-commerce arena.

ENSURING GLOBAL PARTICIPATION

World Bank – Current Activities

- Providing assistance to developing countries through operational funding of legal and regulatory reform
- Encouraging the introduction of new services and applications through private sector participation consistent with WTO principles; and
- Ensuring harmonization with regional and international normative structures.
- Dissemination of experience, good practice and knowledge through publications, participation in international fora and co-operation with other international institutions, such as ITU, UNCITRAL and WTO.

World Bank – Future Work

- Continue assistance in the areas of legal and regulatory reform promoting WTO principles and harmonization.
- Continue knowledge dissemination and co-operation with other international institutions.

infoDev – Current Activities

- Act as a catalyst and forum for the exchange of ideas, a clearinghouse of knowledge and information, in cooperation with the Global Knowledge Partnership (GKP).
- Share worldwide experience with and disseminate best practices to governments and key-decision makers in public & private sectors.
- *infoDev* Conference Scholarship Fund (iCSF): assist individuals from developing countries participate in conferences & seminars that address issues related to ICT for trade & development.

infoDev – Future Work

- Continue current liaison activities between developed and developing economies and the public and private sectors.
- Support to GKP activities, including the Global Knowledge Partnership 2000 Conference.