

ADB ICT STRATEGY AND OPERATIONS

1. ADB's long-term strategic framework (LTSF) (2001-2015) prepared in 2001¹ recognized ICT as a new but increasing challenge for DMCs as it accelerates the globalization process and may widen inequalities in information, skills, technology, infrastructure, and institutions. Against this challenge, it stated ADB's commitment to support ICT to promote development, to improve education system and curriculum, and to close the gap between the information rich and information poor. ADB's independent eminent persons group report² published in 2007 recommended that ADB should add ICT related infrastructure (such as fiber-optic cable networks and data banks) to its current definition of infrastructure. It said that ICT infrastructure will be as essential to an economy as road and rail networks and telephone and power systems have been in the past.

2. Alongside the development of ADB's LTSF, ADB prepared its ICT strategy in 2001,³ which proposed ADB assistance to be focused in promoting ICT policies, applications, human development and strategic alliances and in bridging digital divide. It also suggested that given ADB's limited financial and human resources, its ICT development assistance must be selective and it must encourage regional cooperation and networking to enhance local efforts and promote private sector participation. The following three strategic thrusts were proposed:

- (i) create an enabling environment by fostering (a) the development of innovative sector policies, (b) the strengthening of public institutions; and (c) the development of ICT facilities and related infrastructure, and networks;
- (ii) build human resources to improve knowledge and skills, and to promote ICT-literacy and lifelong learning of citizens through e-learning and awareness programs; and
- (iii) develop ICT applications and information content for ADB supported projects/activities, e.g., poverty reduction and good governance.

3. ADB's ICT strategy also proposes an action plan that is expected to be implemented sequentially, comprising the following four main activities.

- a) Undertake e-readiness assessment in selected DMCs following the procedures for formulating ADB's country strategy and program in a DMC;
- b) Integrate ICT applications in ADB's activities to improve the flow and use of information and knowledge for the effective execution of ADB-supported projects and activities;
- c) Promote strategic alliances and partnerships with existing ICT initiatives at national, regional, and international levels, and establish principles of effective public-private sector partnerships; and
- d) Establish a centre for learning, information, communication, and knowledge for Asia and the Pacific (CLICK) to improve the dissemination and use of information and knowledge for development as well as best practices through ICT.

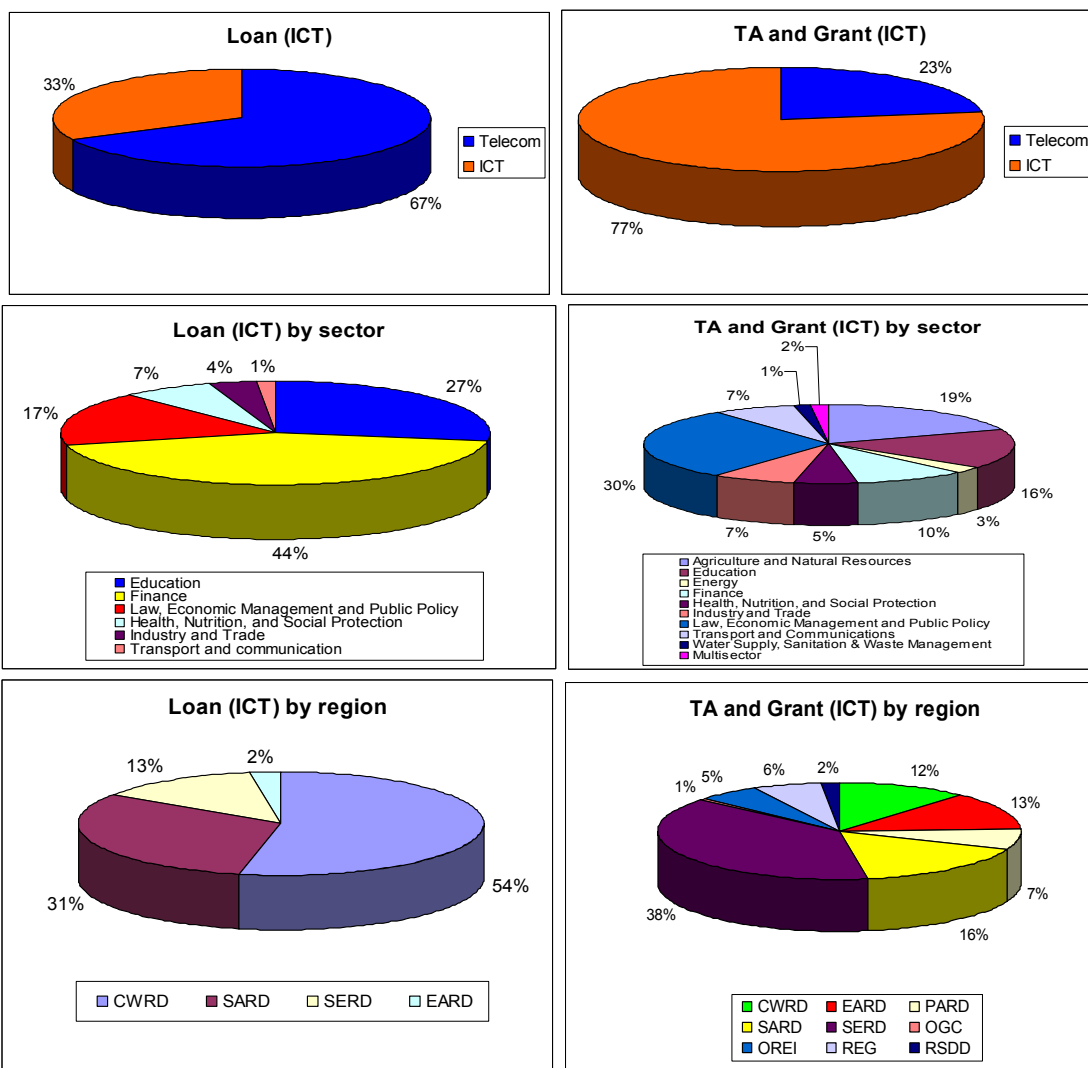
4. ADB's ICT operation has been changed with ADB's strategic directions and in accordance with the technological change and reflecting associated DMCs' needs. The focus was made initially on telecommunication until mid-1980s but gradually moved to the information and technology (IT) support in various sector projects that were related to automation,

¹ ADB. Moving Poverty Reduction Agenda Forward in Asia and the Pacific: Long-Term Strategic Framework (2001-2015). March 2001. Manila.

² ADB. ADB independent Eminent Persons Group report. 2007.

³ ADB. Toward E-development in Asia and the Pacific: A Strategic Approach for ICT. 2001.

informatics, management information system, and e-applications. During 1971–2007, ADB ICT assistance has reached \$2.33 billion–\$2.27 billion for loans, \$66.6 million for technical assistance (TA), and \$13.6 million for grants. Telecommunications sector received 66% of the total assistance (\$1.54 billion–\$1.53 billion for loans and \$14.2 million for TAs) from 1970s to mid-1990s, while ICT received 34% since 2000 (\$264.8 million–\$739 million for loans, \$51.4 million for TAs, and \$13.6 million for grants),⁴ out of which e-government (57%; \$471 million) and e-education (26%; \$213 million) obtained the most attention (83%; \$685 million).



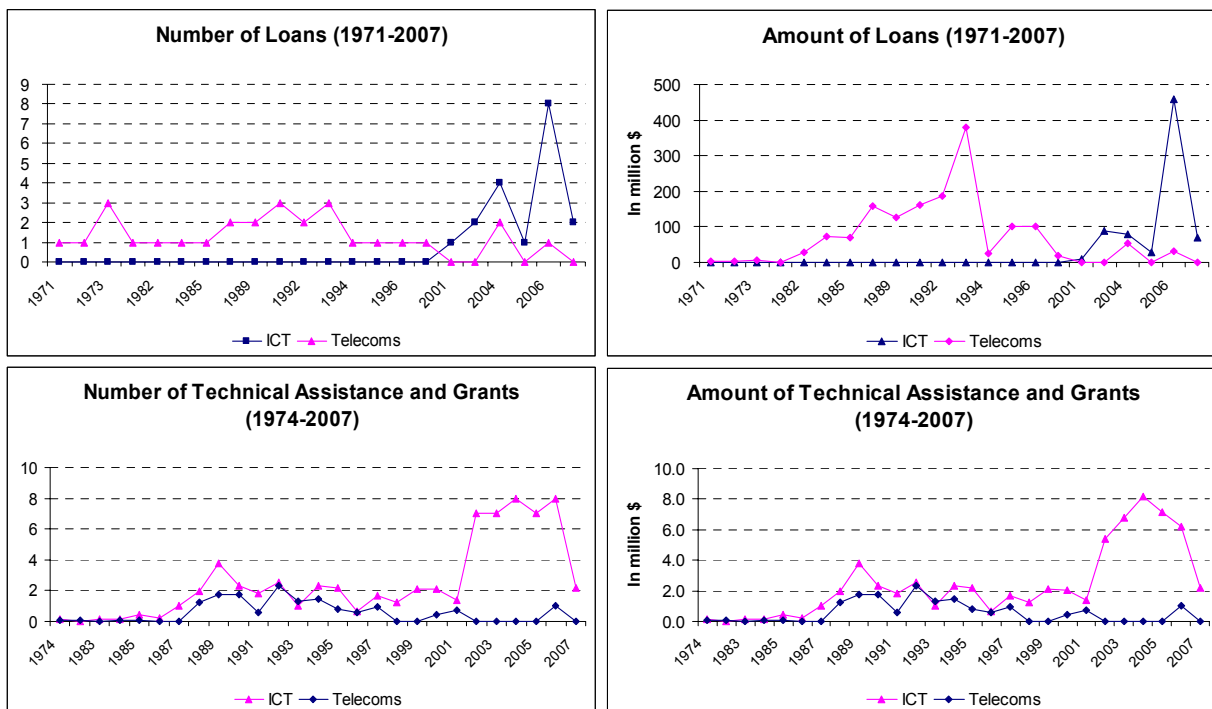
5. ADB has also supported various ICT programs under regional cooperation programs such as Central Asia Regional Economic Cooperation (CAREC), Greater Mekong Subregion (GMS), and South Asia Subregional Economic Cooperation (SASEC). Under CAREC, ICT has been mainstreamed mainly in the areas of trade facilitation and customs modernization as well as education. In GMS, telecommunication related projects have been supported since 1992 but recently the focus is moving to ICT policies and applications. In SASEC, ICT working group,

⁴ Since ADB does not have ICT classification, in this report, ICT project is defined as the sector project which includes major ICT components or which has ICT mainstreamed.

which was established in 2002, has focused on improving cross border connectivity, bridging digital divide, promoting ICT in services and applications, and building human resources in ICT.

6. ADB has two ICT trust funds: (i) the Japan Fund for Information and Communication Technology (JFICT) established in 2001 in the amount of \$10 million, and (ii) Republic of Korea's e-Asia and Knowledge Partnership Fund established in 2006 in the amount of \$20 million. JFICT has supported a total of 13 projects until its termination in 2006 in the areas of e-health, e-education, e-banking, and e-agriculture for Mongolia, People's Republic of China, GMS countries, and SASEC countries. The e-Asia and Knowledge Partnership is under operation and 11 proposals amounting to \$5.15 million have been approved for Cambodia, India, Laos, Mongolia, Kyrgyz Republic, Vietnam, and the region by the Government of Korea to date.

7. The ICT in ADB operations has been slowly taking up but not yet reached into a significant level with an average of \$123 million a year. In the case of the World Bank, the support for ICT applications has been estimated at approximately US \$1 billion a year. As the figures below show, the TA and Grants have been increased significantly in early 2000, which seem to be attributed by the ICT trust fund.



ADB ICT Projects (2000-2007)

LOANS

Count	Loan No.	Country	Dept	Project Name	Objective	Sector	Amount (US\$M)	Fund Type	Year Approved
1	BAN: Loan-2397, BHU: Grant-0098, NEP: Grant-0099, REG:6433	REG	SARD	SASEC Information Highway	To establish robust data interchange capacity for the four SASEC members and expand ICT accessibility in remote rural areas in the region by establishing village networks for SASEC regional village communities.	Transport and Communications	21.00	ADF and RCIF	2007
2	2348	INO	SERD	Nutrition Improvement Through Community Empowerment Project	To upgrade the NSS of the food and nutrition surveillance system (FNSS) in order to strengthen the impact of nutrition programs through better targeting and timeliness.	Health, Nutrition, and Social Protection	50.00	ADF	2007
3	2253	LAO	SERD	Rural Finance Sector Development Program (Project Loan)	To (i) support to BOL to build the capacity to implement the new regulatory and supervisory framework for microfinance; (ii) support for APB to strengthen its human resources, build its human resources management capacity, upgrade its accounting systems, and improve its credit and risk management; and (iii) to upgrade ICT systems for APB and provide related support for implementing the upgrade.	Finance and Industry	2.32	ADF	2006
4	2191	UZB	CWRD	ICT in Basic Education	To improve the quality, relevance and equitable access of basic education for all students, including students in poor and remote areas.	Education	30.00	ADF	2005
5	2132	SRI	SARD	Modernization of the Revenue Administration	To support the strengthening of public finances by improving public resource and expenditure management systems, promoting fiscal discipline, and supporting fiscal decentralization	Law, Economic Management, and Public Policy	15.00	OCR	2004
6	2130	SRI	SARD	Fiscal Management Reform Program	To support the strengthening of public finances by improving public resource and expenditure management systems, promoting fiscal discipline, and supporting fiscal decentralization.	Law, Economic Management, and Public Policy	45.00	OCR	2004
7	2114	REG	CWRD	Regional Customs Modernization and Infrastructure Development (Tajikistan)	To (i) improve the efficiency and transparency of customs services, and reinforce the ongoing customs legal reforms and simplification of custom procedures; and (ii) facilitate trade and promote regional customs cooperation through concerted customs reforms and modernization in the East and Central Asian region.	Industry and Trade	10.70	ADF	2004
8	2113	REG	CWRD	Regional Customs Modernization and Infrastructure Development (Kyrgyz)	To (i) improve the efficiency and transparency of customs services, and reinforce the ongoing customs legal reforms and simplification of custom procedures; and (ii) facilitate trade and promote regional customs cooperation through concerted	Industry and Trade	7.50	ADF	2004

					customs reforms and modernization in the East and Central Asian region.				
9	1999	SRI	SARD	Distance Education Modernization	To boost enrolment, quality, and relevance of learning through distance education.	Education	45.00	ADF	2003
10	1992	VIE	SERD	Support Implementation of the Public Administration Reform Master Program Phase I	To support and facilitate the implementation of the Government's Public Administration Reform Master Program and to assist in building a professional, modern, effective and efficient administration system for the Borrower.	Law, Economic Management, and Public Policy	5.00	ADF	2003
11	1882	MLD	SARD	Information Technology Development	To improve the efficiency, transparency, and accountability of public sector management by networking government agencies and electronically providing information and services for the public.	Transport and Communications	9.50	ADF	2001

TECHNICAL ASSISTANCE AND GRANT

Count	TA No.	Country	Dept	Project Name	Objective	Sector	Amount (US\$K)	Type	Year Approved
1	4954	LAO	SERD	Improved Public Financial Management Systems	To contribute to improved public financial accountability and transparency in support of the Government's development and poverty reduction policy objectives.	Law, Economic Management, and Public Policy	850	TA	2007
2	4830	CAM	SERD	Implementation Of Telecommunications Sector Policy Reforms And Capacity Building	To provide affordable and reliable telecommunications access countrywide through sector reform	Transport and Communications	1,000	TA (JSF)	2006
3	4777	CAM	SERD	Dormitories And Learning Centers For Secondary Schoolgirls	To improve equity and to reduce access barriers to secondary education for poor girls.	Education	800	TA	2006
4	9087	PHI	SERD	Supporting Information Sharing and Exchange Among Civil Servants	To empower the third level executives in performing their functions through networking with their peers and greater sharing of information, data, and experiences (including lessons learned through various local-level initiatives using ICT).	Law, Economic Management, and Public Policy	500	Grant (JFICT)	2006
5	6278	REG/ Pacific	RSDD	Innovative ICT in Education, and its Potential for Reducing Poverty in the Asia and Pacific Region	To improve awareness and holistic understanding among the developing member countries (DMCs) in Asia and Pacific about innovative ICT applications in education, and its potential for reducing poverty.	Education	800	RETA	2005
6	6275	REG/ East & Central Asia	EARD	ICT in Education	To increase effective investments in ICT in basic education for improved education opportunities and closer alignment with labor market needs in the participating countries (Azerbaijan, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, and Uzbekistan).	Education	600	RETA	2005

7	6232	REG/ SASEC	SARD	SASEC ICT Development Master Plan	To foster regional cooperation in ICT among South Asia Subregional Economic Cooperation (SASEC) countries.	Transport and Communications	450	RETA	2005
8	4685	KGZ	CWRD	Preparing the Reform and Modernization of Revenue Administration Project	To support the Government's goal of increasing revenue collection by modernizing revenue administration, the project preparatory technical assistance will design a strategy and action plan focusing on investment in ICT, reorganization, and training.	Law, Economic Management, and Public Policy	500	TA	2005
9	4622	TAJ	CWRD	Tax Administration Modernization and Governance Enhancement	To contribute to poverty reduction and private sector development through (i) improved efficiency and governance of the Tax Administration, and (ii) enhanced revenue collection for poverty reduction and sustainable economic growth.	Law, Economic Management, and Public Policy	500	TA	2005
10	9082	INO	SERD	Support for the Local Government Performance Measurement System	To help strengthen the performance management framework for local governments by providing tools and systems for assessing local government capacity and performance.	Law, Economic Management, and Public Policy	730	Grant (JFICT)	2005
11	9070	PHI	SERD	Developing the Philippine Business Registry	To reduce the cost of doing business and improve the business climate by unifying business registrations currently required by different authorities and facilitating business development through information provision.	Industry and Trade	700	Grant (JFICT)	2005
12	9068	REG	SARD	Empowering the Rural Area Through Community E-Centers under SASEC	To reduce poverty and to improve the quality of life of the rural communities in SASEC countries by providing them ICT accessibility and demand- driven ICT applications through community e- centers.	Multi-sector	1,000	Grant (JFICT)	2005
13	9061	CAM	SERD	Improving Primary School Access in Disadvantaged Communities	To reduce poverty in the poorest districts and communes in Cambodia by ensuring access to primary education for girls from the poorest families, and children living in remote areas.	Education	1,870	Grant (JFICT)	2005
14	6178	REG/ Pacific	PARD	E-Rural Demonstration in the Pacific	To improve the enabling environment for economic growth and poverty reduction in rural areas in the Pacific by improving access to basic communication.	Transport and Communications	230	RETA	2004
15	4495	UZB	CWRD	ICT in Basic Education	To assist the Government in preparing an investment project for integrating ICT in basic education based on a well formulated ICT development strategy in the subsector.	Education	600	TA	2004
16	4451	TAJ	CWRD	Capacity Building and Institutional Strengthening for Customs Modernization and Infrastructure Development	To ensure that the border posts and processing points have adequate border infrastructure, inspection and servicing systems, and modern ICT to effectively process shipments, and have the means to detect and combat smuggling.	Industry and Trade	500	TA	2004
17	4450	KGZ	CWRD	Capacity Building and Institutional Strengthening for Customs Modernization	To ensure that the border posts and processing points have adequate border infrastructure, inspection and servicing systems and modern ICT to effectively process shipments and have the	Industry and Trade	500	TA	2004

				and Infrastructure Development	means to detect and combat smuggling.				
18	9053	MON	EARD	ICT for Improving Rural Health Services	To improve access to and quality of health services for the vulnerable groups of the rural communities, especially poor mothers and children.	Health, Nutrition, and Social Protection	1,000	Grant (JFICT)	2004
19	9051	REG	SERD	Developing a Database on Cross-Border Trade and Investment in Brunei Darussalam, Indonesia, Malaysia, Philippines-East Association of Southeast Asian Nations Growth Area (BIMP-EAGA)	To support the participating countries in revitalizing and sustaining economic cooperation in BIMP-EAGA by establishing institutional and technical infrastructure necessary for quantitative planning and monitoring.	Industry and Trade	300	Grant (JFICT)	2004
20	9050	LAO	SERD	Banking Automation to Support Outreach, Efficiency and Governance	To complement Loan 1931-LAO that will finance the ICT Project for the Lao Development Bank, and the system upgrade for Banque pour le Commerce Extérieur.	Finance	650	Grant (JFICT)	2004
21	9047	REG	SERD	Improving Poor Farmers' Livelihoods through Rice Information Technology	To improve food security and livelihood of poor farmers in the GMS through increased access and application of up-to-date and comprehensive web-based information, and using ICT to share information and experience at the regional level.	Agriculture and Natural Resources	1,000	Grant (JFICT)	2004
22	9044	MON	EARD	ICT for Innovating Rural Education	To break down isolation from information and support for educators in disadvantaged rural areas, and enhance education quality and relevance by empowering teacher innovation towards a pupil-centered, active learning environment.	Education	1,000	Grant (JFICT)	2004
23	9041	REG	OREI	Asian Bonds Online Web Site	To improve information flows for Asian bond markets through the establishment of an Asian Bonds Online Web Site.	Finance	2,400	Grant (JFICT)	2004
24	9036	REG (Cambodia & Viet Nam)	SERD	Improving Poor Farmers' Livelihoods through Postharvest Technology	To address food security issues and to improve the livelihoods of poor farmers through capacity building in rice postharvest technology.	Agriculture and Natural Resources	750	Grant (JFICT)	2003
25	6155	REG/ Central Asia	CWRD	Capacity Building in Environmental Information Management Systems in Central Asia	To help achieve sustainable development by mainstreaming environment into national development planning processes, and strengthening regional cooperation on transboundary environmental management.	Agriculture and Natural Resources	800	RETA	2003
26	6124	REG/ Central Asia	CWRD	ADB-OSI Central Asia Education Cooperation Network	To enhance the education reform processes through improved cooperation between the Central Asia Republics by establishing a network of education stakeholders, interacting primarily through an Internet interface.	Education	200	RETA	2003

27	6107	REG/ Pacific	PARD	Preparing a Pro-poor Subregional E-Government Project for Providing Basic Service Delivery to Remote Communities in the Pacific	To assist the Pacific DMCs in assessing their e-government demand and implementation capacity, mainly with reference to basic social services delivery to remote and disadvantaged communities.	Law, Economic Management, and Public Policy	290	RETA	2003
28	4305	SAM	PARD	Supporting the Samoa SchoolNet and Community Access Pilot Project	To improve quality and efficiency of education, enable access to global information through improved access to ICT, and assist the Government in increasing social inclusion and reducing poverty in the rural areas.	Education	600	TA	2003
29	4194	VIE	SERD	Agriculture Science and Technology	To (i) intensify and diversify agricultural production, (ii) increase farm incomes, and (iii) reduce rural poverty.	Agriculture and Natural Resources	900	TA	2003
30	4128	IND	SARD	Budget Procedure Reform, Computerization, and Expenditure Management (ASSAM)	To strengthen Government of Assam's (GoA) capacity to implement Medium Term Fiscal Reform Program by supporting (i) establishment of a legislative framework; (ii) improvement of state's planning and budgeting process; (iii) strengthening of the GoA's expenditure management and control; (iv) improvement of public sector service delivery; and (v) exploration and piloting of e-governance options for improving staff relations, and procurement and disbursement processes.	Law, Economic Management, and Public Policy	1,000	TA	2003
31	4110	SRI	SARD	Community Information Services for the Poor	To create opportunities for the poor to participate in economic growth by providing vital information.	Law, Economic Management, and Public Policy	800	TA	2003
32	4100	FIJ	PARD	Implementation of the ICT Strategy	To improve the enabling environment for economic growth and poverty reduction by enhancing ICT development in the Fiji Islands.	Transport and Communications	150	TA	2003
33	4080	VIE	SERD	Support to the Office of the Government in the Implementation of Administrative Modernization including Computerization and E-Government Initiatives	To support and facilitate the implementation of the Government's Public Administration Reform Master Program and to assist in building a professional, modern, effective and efficient administration system for the Borrower.	Law, Economic Management, and Public Policy	1,270	TA	2003
34	6083	REG/ GMS	SERD	ICT and HIV/AIDS Preventive Education in the Cross-Border Areas of the Greater Mekong Subregion	To: (i) develop ICT learning materials for HIV/AIDS preventive education in local languages; (ii) build the capacities of teachers, health workers, multimedia providers, and other stakeholders for HIV/AIDS preventive education; (iii) expand the use of ICT interventions in HIV/AIDS preventive education; and (iv) deliver ICT-based interventions to isolated, marginalized, and vulnerable populations.	Health, Nutrition, and Social Protection	1,000	RETA	2002

35	6060	REG/ BIMP-EAGA	SERD	Facilitating Business Information Exchange for Small and Medium Enterprises in BIMP-EAGA Region	To support the development of a strong and dynamic private sector in BIMP-EAGA by helping build the institutional strength and technical capacity of the East ASEAN Business Council.	Industry	500	RETA	2002
36	6038	REG	RSDD	Networking with the Asian Institute of Technology (AIT)	To improve knowledge management in ADB by accessing and utilizing AIT's knowledge, expertise, and experience, in the areas of (i) environment and natural resources; (ii) technology development and use of ICT; (iii) agriculture and rural development; (iv) human resource development and capacity building; and (v) regional cooperation.	Law, Economic Management, and Public Policy	150	RETA	2002
37	4071	UZB	CWRD	Developing a Management Information System (MIS) for Uzbek Telecom (UT)	To provide UT with a modern MIS based on an International Accounting Standards accounting system.	Transport & Communications	400	TA	2002
38	3973	SRI	SARD	School Computerization Project	To prepare an investment project to support the Government's strategy to improve the quality and efficiency of school education to meet new labor market requirements.	Education	500	TA	2002
39	3958	PRC	EARD	Improving Basic Education in Underdeveloped Areas through ICT	To advance policy dialogue on targeted and viable applications of distance education and ICT in the Western Region to improve quality and equity in basic education.	Education	500	TA	2002
40	3951	TAJ	CWRD	Customs Modernization and Infrastructure Development	To support the reforms envisaged under the first phase of the program and to prepare the investment component for the second phase of the program.	Industry	500	TA	2002
41	3950	KGZ	CWRD	Customs Modernization and Infrastructure Development	To ensure that the border posts and processing points have adequate border infrastructure, inspection and servicing systems and modern ICT to effectively process shipments and to detect and combat smuggling.	Industry	500	TA	2002
42	3937	TKM	CWRD	Improving the Statistical Methodology of the National Institute of State Statistics and Information	To (i) conduct a Turkmen Living Standards Survey in 2003 in order to provide an up-to-date and comprehensive assessment of the standards of living and (ii) to advise TurkmenMilliHasabat on the use of the Family Budget Survey for monitoring standards of living, based on an in-depth assessment of the sampling methodology and questionnaire design, data processing, and analysis.	Law, Economic Management, and Public Policy	265	TA	2002
43	3886	VIE	SERD	Implementation of the Public Administration Reform Program	To help formulate and develop the Program Loan to support the implementation of public administration reform with a focus on e-government initiatives to modernize service delivery, work systems and work processes; strengthening training institutions; and developing and conducting training programs to enhance skills of Government officials.	Law, Economic Management, and Public Policy	427	TA	2002

44	9029	REG	RSDD	Development of a Business Plan for a Center for Learning, Information, Communication, and Knowledge for Asia and the Pacific (CLICK)	To develop a sound and viable business plan, which is a prerequisite to the establishment of the CLICK, and to define its mission, role, goals and objectives of the CLICK.	Education	180	Grant (JFICT)	2002
45	9020	VIE	SERD	E-Health Insurance Membership Cards	To demonstrate the feasibility of introducing the E-HI cards that can facilitate the expansion of health insurance coverage in rural and poor communities.	Health, Nutrition and Social Protection	500	Grant (JFICT)	2002
46	5990	REG/ Pacific	PARD	ICT Assessment in the Pacific	To help the Pacific DMC governments assess their ICT readiness, prepare the framework for future development in the sector, and identify bankable projects for such.	Transport and Communications	300,	TA	2001
47	5981	REG	OREI	Asia Recovery Information Center, Phase II	To continue and consolidate the ARIC activities in Phase I and implement new activities, taking into account the faster than expected recovery in Asia.	Law, Economic Management, and Public Policy	930	RETA	2001
48	3743	TIM	PARD	Microfinance Information Technology Systems Development	To assist the Economic Affairs Department of the United Nations Transitional Administration in East Timor in strengthening microfinance institutions' operations and credit unions to enhance their viability and enable them to provide responsive microfinance services.	Finance	150	TA	2001
49	5971	REG/ SASEC	SARD	Regional Round Table on ICT	To share India's successful experience with ICT development.	Transport and Communications	90	RETA	2000
50	5955	REG	EDOD	ADB-ADB Workshop on ICT Strategy for Developing Asia	To raise the DMCs' awareness about the wide ranging social and economic implications of the ICT revolution; and provide a forum for DMC policymakers to share their knowledge and experience in developing ICT strategies.	Transport and Communications	50	RETA	2000
51	5954	REG	EDAN	Seventh Joint ADB-OECD Forum on Asian Perspectives - Technology and Poverty Reduction in Asia	To (i) discuss the role of technological progress including ICT in poverty reduction and socioeconomic development; (ii) make policy recommendations to assist DMCs in developing the policy strategy for technological advancement for poverty reduction; and (iii) examine the role of the OECD and the ADB in this context.	Law, Economic Management, and Public Policy	145	RETA	2000
52	5931	REG	AWEH	Support for ICT and Education	To address the growing "digital divide" by making regional DMCs more aware of the potential for ICT in education to prepare students for work in the new economy through the international roundtable and workshop.	Education	100	RETA	2000
54	3611	RMI	PARD	Reviewing the Health Management Information System (HMIS)	To (i) review the existing HMIS, (ii) develop an action plan for health information in RMI, and (iii) identify the kind and level of assistance required over the medium term to ensure that the HMIS generates reliable, comprehensive, and usable information.	Health, Nutrition, and Social Protection	100	TA	2000

55	3597	MLD	SARD	Information Technology Development	To prepare a project to improve efficiency, transparency, and accountability of public sector management including provision of Government services through ICT.	Law, Economic Management, and Public Policy	150	TA	2000
56	3581	NEP	SARD	ICT for Improved Financial Services Provision	To increase the competitiveness of Nepal's financial sector by reducing transaction and information costs through the use of ICT.	Finance and Industry	565	TA	2000
57	2862	LAO	SERD	Management Information System (Supplementary)	To build up the institutional framework, as well as training the staff of the Communications Department of the Ministry of Communications, Transport, Post and Construction in the application of management information systems.	Transport and Communications	280	TA	2000