



Technical Assistance Report

Project Number: 38055
December 2005

Technical Assistance Subregional Cooperation for Information and Communications Technology in Basic Education

Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
ADB I	–	Asian Development Bank Institute
CD-ROM	–	compact disc read-only memory
DMC	–	developing member country
GFP	–	government focal point
IA	–	implementing agency
ICT	–	information and communications technology
RCSPU	–	regional cooperation strategy and program update
RETA	–	regional technical assistance
TA	–	technical assistance
TCO	–	total cost of ownership
TOR	–	terms of reference

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	–	General intervention
Sector	–	Education
Subsector	–	Basic education
Themes	–	Sustainable economic growth, regional cooperation, capacity development
Subthemes	–	Addressing information and communications technology issues, institutional development

NOTE

In this report, "\$" refers to US dollars.

Vice President	J. Eichenberger, Operations Group 2
Director General	H. S. Rao, East and Central Asia Department (ECDR)
Director	R. Wihtol, Social Sectors Division, ECRD
Mission leader	L. Wu, Principal Social Sector Economist, ECRD
Team member	M. Prina, Young Professional, ECRD

I. INTRODUCTION

1. Developing information and communications technology (ICT) is a priority in all developing member countries (DMCs) of the Asian Development Bank (ADB) in the East and Central Asia Region. Integrating ICT in basic education is a key component of their strategy. The technical assistance (TA) is listed in the Regional Cooperation Strategy and Program Update (RCSPU) 2006–2008. The TA is based on consultations with government agencies in the participating countries (Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan) that will be major stakeholders in the TA. Fact-finding was conducted during September and October 2005 through (i) the Fact-Finding Mission to Kazakhstan, Kyrgyz Republic, and Uzbekistan; and (ii) consultation by resident missions in Azerbaijan, Mongolia, and Tajikistan.¹ The Asian Development Bank Institute (ADBI) will provide parallel financing for and support the implementation of the TA. The design and monitoring framework is in Appendix 1.

II. ISSUES

2. Aligning education to the changing needs of the labor market is a long-term challenge for the Central Asian countries in their transition to a market-based economy. Integrating ICT in education is a key component in meeting this challenge. International experience shows that the appropriate use of ICT helps students improve their learning achievements, learn more in less time, and develop positive attitudes toward and strengthen their motivation for learning. In particular, effective ICT use promotes student-centered learning and helps to develop higher order thinking and independent learning skills. These are crucial for lifelong learning and adapting to changing labor market demands. In addition, these are essential conditions for long-term economic development, and vital for national competitiveness in a world economy that is becoming increasingly integrated and information- and knowledge-based.

3. Keenly aware of the substantial benefits that ICT could bring, the participating countries accord high priority to ICT development in education within their broad national development frameworks.² Some countries have made significant investments in ICT in education in the past. However, ICT including the internet remains underused and underdeveloped in the region. Given the common past shared by the education systems of the participating countries and their diverse pace and progress in ICT development, there will be significant value in (i) exchanging experiences and lessons learned within the region; and (ii) benefiting from experience and lessons in integrating ICT in education from other regions of the world.

4. ADB is well-positioned to assist in this regional endeavor, with its experience in both regional cooperation and ICT in education. Promoting ICT in education is a focus of ADB's education sector strategy. Ongoing regional activities relating to ICT in education include (i) an annual conference on ICT in education since 2004; (ii) a major study published in 2005;³ and (iii)

¹ The TA first appeared in *ADB Business Opportunities* (internet edition) on 9 September 2005.

² The National Information and Communication Technologies Strategy for the Development of the Republic of Azerbaijan (2003–2012), the Main Directions and the Mechanism for Implementation of the Program--Informatization of Education of the "Governmental Program on the Development of Education for 2005–2010" of the Republic of Kazakhstan, the National Strategy "Information Communication Technologies for the Development of Kyrgyz Republic," the Policy Paper "Vision for the Development of Information and Communication Technology until 2010" of Mongolia, the State's Strategy "Information Communication Technologies for Developing the Republic of Tajikistan," the "ICT in Basic Education Strategy" of Uzbekistan.

³ ADB. 2005. *Information and Communication Technologies in Education and Training in Asia and the Pacific*. Manila.

a regional TA on the implications of ICT development for poverty reduction.⁴ Specific to Central Asia, ADB provided significant assistance in Kazakhstan's early efforts to introduce ICT in schools, and also provided support for ICT in education projects in the Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan. ADB has assisted the Government of Uzbekistan in developing a comprehensive 10-year ICT development strategy in basic education. In addition, ADB has gained the support and confidence of the participating countries in the region in promoting and supporting regional cooperation including in the education sector.⁵ This extensive experience provides a solid foundation for the proposed regional TA. The TA will therefore provide a keenly needed regional forum for promoting learning and exchange of experience in ICT in basic education. ADBI's participation will allow the TA to benefit from ADBI's considerable experience and expertise in (i) e-learning materials development and capacity building; (ii) development and application of distance learning capacity, which has important implications for Central Asia in terms of equitable access to quality education; and (iii) the integration of ICT in basic education in advanced economies through international experts. The experience and role of ADBI are described in Appendix 2.

5. Based on the experience of the participating countries to date in integrating ICT in basic education, a number of key issues will need to be successfully addressed to reap the substantial potential benefits from ICT use in schools.

6. **Education System Preparedness.** ICT is a tool for improving the accessibility, quality, and relevance of education. To achieve these educational objectives requires a wide-ranging set of conditions including an ICT-based curriculum, education standards and assessment system; a majority of teachers adept at ICT use in a multiple of subjects across the curriculum; abundant e-learning materials; and an adequate learning environment at the school level. Developing these conditions for the effective use of ICT in schools will take time. While curriculum-related reforms have been under way in all participating countries since the early 1990s, much remains to be done. Although pre-service and in-service teacher training has improved in terms of incentives and remuneration, teacher-centered methodologies and classroom practices continue to dominate. In addition, underfunded school buildings and classrooms, where the fiscal budget and financial situations are challenging, pose difficulties in providing appropriate physical conditions for effective ICT use.

7. **Financial Sustainability.** Integrating ICT in basic education is costly. The total cost of ownership (TCO) includes the initial investment for ICT facilities and their replacement over time; direct recurrent costs including consumables, and operation and maintenance; and indirect recurrent costs (e.g., materials development for e-learning, teacher training and retraining). Internet connectivity as a key component of ICT is still costly in the targeted countries. To a large extent, it is the high TCO that has to date prevented more expanded use of ICT in education in the region. Even in those participating countries with more advanced experience in ICT in schools, how to effectively budget the costs and allocate sufficient financial resources to schools within a decentralized education financing system remains a challenge.

⁴ ADB. 2005. *Innovative Information and Communication Technology in Education, and Its Potential for Reducing Poverty*. Manila. For synergy and complementarities, the TA will closely coordinate with these ongoing ADB initiatives during implementation. The TA will also coordinate closely with other development partners including the United Nations Education, Scientific and Cultural Organization (UNESCO), which is finalizing a *Toolkit for ICT in Education*; and United States Agency for International Development (USAID) which is pilot testing ICT in selected schools in Uzbekistan.

⁵ ADB. 2004. *Technical Assistance for Subregional Cooperation in Managing Education Reforms*. Manila.

8. **Technological and Infrastructure Development.** Technological development in ICT is accelerating, resulting in ever more user-friendly, durable and cheaper equipment and applications, and improved connectivity (e.g., wireless systems). These developments have important implications for reducing TCO, improving financial sustainability, and lessening dependence on heavy infrastructure. The implications of such technological developments will need to be explored with special reference to the participating countries where infrastructure as required by the traditional personal computer-based paradigm is underdeveloped or under-used. Accelerating technological advances also offer potential opportunities for leapfrogging of the traditional approach of ICT in education in the participating countries.

9. **Equitable Access.** Ensuring equitable access to quality basic education is a stated goal of each of the participating countries. ICT offers some of the best ways for its delivery. This is particularly important for Central Asian countries with low population density and challenging terrains and geographical conditions. However, ICT tends to develop first and fastest in urban and affluent areas. To use ICT effectively in improving access to quality education in rural and remote areas while preventing and breaking through the internal digital divide will require targeted policies and interventions. Exploring new and future technological developments will also be part of the potential solutions.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

10. The impact of the TA is to increase the effectiveness of investments in ICT in basic education for improved education opportunities and closer alignment with labor market needs in the participating DMCs. The outcome of the TA is enhanced capacity of the participating DMCs to plan and effectively implement projects and programs for ICT in basic education.

B. Methodology and Key Activities

11. **Capacity Building and Process Approach.** Consistent with the TA outcome, developing indigenous capacity is a key TA activity. For effectiveness, the TA will follow a process approach to capacity building throughout TA implementation. In particular, participating implementing agencies (IAs) will be responsible for developing the products in their respective countries, while the consultants will serve as facilitators. This learning-by-doing approach will be more effective than training in short workshops and seminars. Working meetings at the national level will be held as part of capacity building. Given the centralized decision-making structure in many of the participating countries, capacity building will target ministries and agencies of the central Government, supported by wider consultations involving other stakeholders during the process including nongovernment organizations especially with regard to community participation, and industry representatives focusing on technological development and public-private partnerships. Key baseline data for monitoring and evaluation will be established during the first 2 months of TA implementation.

12. **Implementation Phases.** The TA will be implemented in three phases over 18 months, starting from April 2006: (i) research and development (months 1–10); (ii) exchange of experiences and lessons (months 11–12); and (iii) finalization of the integrated knowledge products (months 13–18). Overlapping of phases will allow continuity and flexibility in implementation.

13. **Research Development.** Each national team consisting of key stakeholders (ministries of education, finance, and telecommunication) will develop its own work plan and research designs. The research methodology and work plan will be finalized in a regional meeting, which will bring all participating countries together to ensure coordination of research scope and timelines. The research will then be carried out in each country through a comprehensive study and compilation of cases. A working meeting bringing together all relevant major stakeholders in the field of ICT in basic education in the country will be held, with other working meetings planned during the process for enhancing capacity building (the number of meetings will vary according to national needs). The outputs of the research activities carried out at the national level will include (i) a country report on the status of ICT for each participating country, and (ii) a set of case studies and lessons learned for each country, with special focus on the issues discussed above. These outputs will be the basis for developing issue papers on (i) financial planning and sustainability; (ii) methodology and pedagogy; (iii) analysis and investments planning; (iv) social inclusion (with special focus on remote communities and disabled children); (v) school management and community involvement; and (vi) private sector participation (depending on capacity and interest, a country may develop papers on one or more issues).

14. **Public Forum and Exchange of Experiences.** Country studies, issue papers, and analytical tools produced during the research phase will be shared at an international conference. The international conference will be a TA's main vehicle both for knowledge and experience sharing and capacity building. The conference will be organized in partnership with ADBI, benefiting from the knowledge and experience developed in other countries and other sectors of ICT. At the international conference, the participating countries will present their experiences, and stakeholders from the region, funding agencies, and civil society involved in ICT projects in basic education, together with international experts, will add value to the research results and in planning ways forward. The conference will also provide capacity-building opportunities by organizing workshops with ADBI and international experts on each of the issues related to ICT in basic education.

15. **Finalization of the Integrated Knowledge Products.** All reports, issue papers, and analytical tools, together with the inputs of the international conference, will serve as content materials for producing an integrated set of knowledge products on ICT in basic education for development results—providing a comprehensive framework for analysis, planning, and evaluation. The knowledge products will include (i) a regional report on the status of ICT development in basic education in the region emphasizing experiences, issues, and lessons learned; (ii) several issue papers covering the issues and benefits of investments in ICT (financial planning and sustainability; educational benefits; technological and infrastructure development, investment planning; social inclusion; school governance, management, and capacity building); and (iii) tools for policy analysis and planning. The knowledge products will be developed for future use by government officials and other stakeholders for effective planning, implementation, and evaluation of ICT activities in basic education. Once the products are finalized, they will be launched in each of the participating countries at a working meeting that will also serve as a national capacity-building activity.

C. Cost and Financing

16. The total cost of the TA is estimated at \$900,000 equivalent. The amount of \$600,000 will be financed on a grant basis by ADB's TA funding program, \$100,000 equivalent will be financed on a grant basis by ADBI through parallel cofinancing, and the governments of the participating DMCs will jointly contribute a total of \$200,000 in kind. Detailed cost estimates are in Appendix 3.

D. Implementation Arrangements

17. ADB will be the Executing Agency for the TA (Social Sectors Division, East and Central and Asia Department), and the Ministry of Education (or its equivalent) in each participating country will be the IA.⁶ Each IA will identify a person as the government focal point (GFP) within the ministry. The GFPs will work in close cooperation with representatives of the ministry in charge of economic planning and the budget⁷ and the Ministry of Information Technology (or the equivalent agency)⁸ and other relevant government bodies contributing to develop ICT in the basic education sector. The GFPs should have experience and expertise in national education policy and ICT policy. They will work in close coordination with the consultant team and will participate in all TA activities, providing all support as necessary, including inputs, data for preparing country report and issue papers, coordinating with all relevant stakeholders, and assisting in organizing all meetings. Outline terms of reference (TOR) for the GFPs are in Appendix 4.

18. The TA will require the services of one international consultant (an education specialist/team leader with specific experience and knowledge of ICT in basic education sector issues in the region) for a total of 6 person-months, and six country coordinators for a total of 60 person-months. The country coordinators will have research and analytical skills, knowledge of ICT issues in the basic education sector, and capacity to relate to different aspects of the issues of ICT. The consultant team will work in collaboration with the GFPs and relevant counterpart staff of the participating countries. The international consultant and the six country coordinators will be engaged by ADB through a firm using quality- and cost-based selection with full technical proposals in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for engaging domestic consultants. Appendix 4 gives the outline TOR for consulting services.

19. The country reports, issue papers, and analytical tools for planning investments in ICT in basic education will be shared at the international conference, which will take place during month 12 of implementation. The integrated knowledge products, and results of the research activities and the international conference will be disseminated in all countries in English, Russian, and the national languages. The knowledge products will be published with a multimedia format (printed and CD-ROM version) and will be launched in each participating country, and at the regional level through the ADB website and other regional websites.

IV. THE PRESIDENT'S DECISION

20. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$600,000, on a grant basis for Subregional Cooperation for Information and Communications Technology in Basic Education and hereby reports this action to the Board.

⁶ Ministry of Education of Azerbaijan, Ministry of Education and Science of Kazakhstan, Ministry of Education of Kyrgyz Republic, Ministry of Education, Culture and Science of Mongolia, Ministry of Education of Tajikistan, and Ministry of Public Education of Uzbekistan.

⁷ Ministry of Economy and Budget Planning of Azerbaijan, Ministry of Economy and Budget Planning of Kazakhstan, Ministry of Economy and Finance of Kyrgyz Republic, Ministry of Finance of Mongolia, Ministry of Finance of Tajikistan, and Ministry of Finance of Uzbekistan.

⁸ Ministry of Communications and Information Technologies of Azerbaijan, Agency for Informatization and Communication of Kazakhstan, Ministry of Transport and Communication of Kyrgyz Republic, Information and Communication Technology Authority of Mongolia, Ministry of Communications of Tajikistan, and Uzbek Agency for Communication and Informatization.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p>Impact Effective investments in ICT in basic education increased in the participating countries, contributing to improved education opportunities.</p>	<p>Number and quality of established programs and projects for ICT in basic education increased in the participating countries (data on current number and quality evaluation will be part of the research exercise).</p> <p>Gap in education opportunities in rural and urban areas decreased (baseline will be established during research exercise).</p>	<p>Regional programs and projects</p> <p>Regional and country poverty survey</p>	<p>Assumption</p> <ul style="list-style-type: none"> Resources are available for policy planning and capacity building. <p>Risk</p> <ul style="list-style-type: none"> Investments in infrastructure and cost of use of ICT do not support the education sector policy programming.
<p>Outcome Enhanced capacity for planning and effective implementation of projects and programs for ICT in basic education in the participating countries</p>	<p>Awareness of benefits and issues related to ICT in basic education increased (baseline established during fact-finding mission and months 1–4 of project).</p> <p>Knowledge of available experiences and lessons learned increased (baseline established during months 1–4 of project)</p> <p>Analysis tools and familiarity with the same are available.</p>	<p>Pre- and post-project interviews, feedback of participants in capacity building activities</p> <p>Evaluation reports</p> <p>Integrated knowledge product</p> <p>ADB missions</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Communication among participant countries is continuous and countries are open to learn from participants' experiences. Participants are willing to embrace a learning process and share learning results. <p>Risks</p> <ul style="list-style-type: none"> There are instability and major negative shocks to economic growth of countries in the region. Policies for integrating ICT in education are slowing down and/or backtracking.
<p>Outputs 1. Experiences exchanged and awareness and understanding deepened of benefits, issues, and requirements for effective and sustainable ICT investments in basic education in the region</p>	<p>Work plans are completed at national meetings (10 participants for each country) held during first trimester.</p> <p>National work plans are synchronized in scope, methodology, and timing at the first regional meeting (30 participants) held by months 5-6.</p> <p>Capacity building is conducted through exchange of experiences from both in and outside region at an International conference (100 participants) held at month 12. Capacity building is conducted through launching of the set of</p>	<p>Reports and conference material</p> <p>ADB missions</p> <p>Knowledge product</p>	<p>Assumption</p> <ul style="list-style-type: none"> Identified counterpart staff will participate in all phases of the project to ensure learning and capacity results. <p>Risk</p> <ul style="list-style-type: none"> Potential delays are due to diversion of time of relevant officials and other unanticipated official duties.

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p>2. Publication of integrated knowledge products (multimedia format): "ICT in basic education for development results in the Central Asia Region." A comprehensive framework for analysis, planning, and evaluation. The knowledge products comprise:</p> <p>2.a. Regional report on status of ICT in basic education in the region (experiences, issues, lesson learned, needs and expectations)</p> <p>2.b Six issue papers containing policy analysis and hands-on suggestions, case studies and lessons learned from the region; specifically: (i) ICT in basic education: financial planning and sustainability; (ii) ICT and educational benefits: methodology and pedagogy; (iii) ICT in basic education and infrastructure: analysis and investments planning; (iv) ICT in basic education and social inclusion (with special focus on remote communities and disabled children); (v) ICT in basic education and school governance: management and community involvement; (vi) ICT in education and private sector participation.</p> <p>2.c Policy analysis and planning integrated tools</p>	<p>knowledge products at a national workshop in each country at months 17-18 of project (10–15 participants each)</p> <p>All outputs (2.a, 2.b, 2.c) delivered on time</p> <p>Data collection methodology agreed upon by month 4 of the project</p> <p>Products are completed by month 16</p> <p>Products are launched and distributed in all countries by month 18</p> <p>Prestudy is completed by month 4</p> <p>Country studies are collected by month 8</p> <p>Quality level is respected: Information is detailed, original, documented and justified. The report continuously refers to country experiences, analyzing best practices, issues and lessons learned.</p> <p>Preliminary inputs are collected during project research material development (months 1-4).</p> <p>Draft of general parts is ready by month 8.</p> <p>Country case studies are collected by month 8.</p> <p>Quality level is respected: country study are complete, refer to cases and experiences, cover all issues, and participation of all country players is reflected in the papers.</p> <p>Products are tested during the international conference (month 12)</p>	<p>Feedback from project participants and beneficiaries from beneficiaries, feedback and contribution from other international organizations</p> <p>ADB missions</p>	

Activities with Milestones	Inputs
<p>1. All project materials will be developed and the work plan at the regional level will be agreed upon. (months 1–4)</p> <p>1.1 Pre-study and development of M&E system (identification of issues and common interests) (months 1–4)</p> <p>1.2 RETA team workshop is held (month 3)</p> <p>1.3 First national working meeting is held.</p> <p>1.4 First regional meeting is held.</p> <p>1.5 Project materials are developed and endorsed. (months 1–4)</p> <p>2. Regional study on ICT in basic education is conducted and first workshop takes place. (months 5–10)</p> <p>2.1 Each country conducts country study using agreed-upon format. (months 5–8)</p> <p>2.2 National working meetings are conducted to identify issues, experiences, lessons learned, and capacity needs (month 5–6)</p> <p>2.3 Country surveys/case studies are carried on in each country with agreed-upon format and deadline. (months 5–7)</p> <p>2.4 Country studies are completed and collected at the regional level. (month 8)</p> <p>2.5 Country studies are integrated and regional study is drafted. (months 9–10)</p> <p>3. Issue papers are drafted. (months 5–10)</p> <p>3.1 Issue papers general parts are developed. (months 5–8)</p> <p>3.2 Country cases are integrated with issue papers. (months 9–10)</p> <p>4. Policy analysis and planning integrated tools are developed. (months 5–10)</p> <p>4.1 Planning and analysis tools samples are collected. (months 5–8)</p> <p>4.2 Planning and analysis tools are developed based on issue papers and country cases. (months 9–10)</p> <p>5. Generated knowledge is shared and discussed in a public forum. (months 9–12)</p> <p>5.1 International conference is prepared and finalized including governments, aid agencies, and beneficiaries. (months 9–12)</p> <p>5.2 International conference takes place. (month 12)</p> <p>6. Knowledge products “ICT in Basic Education for Development Results in the Central Asia Region. A Comprehensive Framework for Analysis, Planning and Evaluation” is finalized and published. (months 13–18)</p> <p>6.1. Conference results and material are integrated with a regional study and issues paper. (month 13)</p> <p>6.2 Regional report, issue papers, and policy tools are finalized. (months 13–14)</p> <p>6.3. The regional report, issue papers, policy analysis and planning tools, conference material, and regional data are integrated in a unique product, and this is published in both printed and multimedia edition (months 14–17).</p> <p>7. The knowledge products are tested at the country level for a “sample” capacity-building activity.</p> <p>7.1 The integrated knowledge product is launched at regional and country level: second national workshop takes place. (months 17–18).</p>	<p>ADB - \$600,000</p> <ul style="list-style-type: none"> • Consulting services 66 PM - \$ 355,000 • Training, Seminars, Workshops - \$200,000 • Contingency - \$45,000 <p>ADBI</p> <ul style="list-style-type: none"> • International Conference - \$100,000 <p>Governments - \$200,000</p> <ul style="list-style-type: none"> • Office Accommodation and Transport - \$80,000 • Counterpart Staff - \$100,000 • Others - \$20,000

ADB = Asian Development Bank, ADBI = Asian Development Bank Institute, ICT = information and communications technology, M&E = monitoring and evaluation, RETA = regional technical assistance.

ASIAN DEVELOPMENT BANK INSTITUTE (ADBI) EXPERIENCE AND TERMS OF REFERENCE

1. Developing applications of information and communications technology (ICT) with relevance to the poor has been a major focus of ADBI's programs since its inception in 1997. More than 15 workshops in e-learning, e-community development, e-governance, and e-business, in partnership with the public and private sector have been conducted. The experience has given ADBI unique knowledge in the area of ICT. As part of ongoing knowledge management activities, about 100 titles of lecture compact discs read-only memory (CD-ROMs) based on workshops and seminars have been produced for wider dissemination of new knowledge and skills.

2. ADBI uses four main mechanisms to conduct and disseminate ICT-related work to increase literacy, bridge the digital divide, and reduce poverty:
 - (i) face-to-face courses (workshops, seminars, and conferences) for selected participants, including government officials and the private sector and nongovernment organization representatives;
 - (ii) tailor-made and country-specific courses for government officials prepared in the local languages and in partnership with local training institutions;
 - (iii) distance learning applications, primarily using compact discs read only memory (CD-ROMs) produced by ADBI but also using the Global Development Learning Network (GDLN) of the World Bank Group; and
 - (iv) on-line courses through the ADBI website.

3. ADBI will support the regional technical assistance (RETA) by providing the following services:
 - (i) Assist in developing knowledge products that will be deployed in CD-ROMs first and eventually in digital versatile discs (DVDs), on-line courses, and distance learning mode.
 - (ii) Provide (a) knowledge and support in organizing national workshops and the international conference, and (b) inputs and knowledge to be shared at national workshops and the international conference for training of teachers and administrators in developing e-learning programs through subregional and country courses.
 - (iii) Bring international experts to the international conference.
 - (iv) Draft project proposals to introduce/improve e-learning programs in participating countries, if required by the governments of the participating countries.
 - (v) Evaluate the capacity-building impact of the RETA.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	150.00	00.00	150.00
ii. Domestic Consultants		120.00	120.00
b. International and Local Travel	30.00	20.00	50.00
c. Reports and Communications	15.00	20.00	35.00
2. Training, Seminars, and Conferences			
a. Regional and National Working Meetings	60.00	70.00	130.00
b. International Conference	35.00	00.00	35.00
c. Facilitators including Staff Travel for Invited Resource Persons/Speakers	35.00	00.00	35.00
3. Contingencies	25.00	20.00	45.00
Subtotal (A)	350.00	250.00	600.00
B. Asian Development Bank Institute Parallel Financing			
1. International Conference	100.00	00.00	100.00
Subtotal (B)	100.00	0.00	100.00
C. Governments Financing^b			
1. Office Accommodation and Transport	0.00	80.00	80.00
2. Remuneration and Per Diem of Counterpart Staff	0.00	100.00	100.00
3. Others	0.00	20.00	20.00
Subtotal (C)	0.00	200.00	200.00
Total	450.00	450.00	900.00

^a Financed by the Asian Development Bank's technical assistance funding program.

^b Governments of Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS AND THE GOVERNMENT FOCAL POINTS

1. One international and six domestic consultants will provide 66 person-months of consulting services.

1. Team Leader ICT in Basic Education Specialist (international, 6 person-months)

2. The international consultant will have extensive knowledge of and experience in the education sector in the region developed in the field, and the situation regarding information and communications technology (ICT) in basic education in the participating countries. She/He will have international experience in policy disclosure, research, and capacity-building activities; be an expert in developing tools for education policy analysis; and be able to apply this knowledge to ICT in the basic education sector. She/He will have demonstrated experience in project coordination activities across countries. The consultant's services will be intermittent over a period of 18 months, involving substantial traveling in the participating countries.

3. The specific tasks are as follows:

- (i) Prepare a detailed work plan for the research activities and knowledge products development and finalization, including plans for the national coordinators and the government focal points (GFPs).
- (ii) Develop the research tools, surveys, and reports format to be used in the technical assistance (TA) activities, including a monitoring and evaluation (M&E) system and baseline data.
- (iii) Coordinate the work of the national coordinators and the GFPs, ensuring timely submission of quality outputs.
- (iv) Finalize the regional report.
- (v) Be in charge of coordinating the development and finalization of the issue papers.
- (vi) Develop and finalize the analytical tools for policy analysis.
- (vii) Organize the national working meetings in all countries.
- (viii) Provide inputs and assist in organizing the international workshop.
- (ix) Assist in finalizing the knowledge products, including the regional report, the issue papers, the analytical tools and the international workshop material
- (x) Submit progress reports to the Asian Development Bank (ADB), as specified in the TA schedule (in months 4, 10, 12, 16, 18); submit monthly update reports to ADB (on status of activities and progress), participate in the midterm review of the TA, and the international workshop and relevant meetings.

2. National Coordinator (a total of 50 person-months for 6 domestic consultants)

4. The consultants will have knowledge of the education sector of the country and experience in education policy analysis and assessment, and specific knowledge of at least one among the six issues explored in the TA regarding ICT in basic education. They will have experience in working with international organizations and demonstrated ability to carry on research work respecting deadlines. They will have good knowledge and relationships with national governments and civil society within the country. Fluency in English and Russian is crucial. Each consultant will be engaged for 10 person-months for intermittent work over 18 months.

5. The specific tasks are as follows:

- (i) Carry on research at the national level, coordinating activities in partnership with the GFPs.
- (ii) Finalize the country report.
- (iii) Assist the team leader in finalizing the regional report.
- (iv) Contribute to the elaboration of the issue papers, providing inputs on each issue by carrying on research at the country level in coordination with the GFPs; in particular, be in charge of finalizing at least one specific issue paper, collecting information from all national coordinators and assisting the team leader in finalizing the products.
- (v) Organize the national working meetings in the country.
- (vi) Contribute to the preparation of the international workshop.
- (vii) Assist the team leader in finalizing all knowledge products.
- (viii) Submit monthly reports on the status of activities.
- (ix) Carry out other tasks as required to complete the research and the knowledge products.

3. Government Focal Point

6. Each participating country will identify a GFP, who will be in charge of assisting ADB and the TA team in implementing TA activities. The GFP will be within the Ministry of Public Education (or its equivalent), have knowledge of education policy and ICT policy, be familiar with country policy and programs, and have knowledge of ICT experiences in the country. The GFP will work in coordination with ADB and the TA team. They will participate in the inception workshop, assist in organizing the national working meetings, and participate in the international workshop.

7. The GFP will assist in preparing the country reports by providing the TA team with data, inputs, and support. In collaboration with other relevant counterpart staff, the GFP will provide inputs and data for developing the issue papers. The GFP will help identify participants for the national working meetings and the international conference, and assist in other matters to facilitate project implementation.