付属資料

1. ミニッツ及び合同評価レポート
2. PDM(Project Design Matrix)日本語版
3. 評価グリット
4. カザフスタンの IT 市場概況
5. キルギス IT サービス産業　コンセプト図
6. 想定される協力
7. 質問票
8. 収集資料
   - キルギス IT 事情
   - 「キルギス共和国の情報通信技術 2002－2006」2007 年
     （ロシア語版別途保管）

MINUTES OF MEETING
BETWEEN THE JAPANESE FINAL EVALUATION TEAM
AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT
OF THE KYRGYZ REPUBLIC
ON THE JAPANESE TECHNICAL COOPERATION PROJECT
"IT HUMAN RESOURCE DEVELOPMENT
IN THE KYRGYZ REPUBLIC (NATIONAL IT CENTER)"

The Japanese Final Evaluation Team (hereinafter referred to as "the Japanese Team"), organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Hiroyuki IDE visited the Kyrgyz Republic from February 26 to March 12, 2008 for the purpose of conducting a Final evaluation and of the Project "IT Human Resource Development in the Kyrgyz Republic (National IT Center (hereinafter referred to as "NITC")) (hereinafter referred to as "the Project").

During its stay in the Kyrgyz Republic, the Japanese Team had series of discussions and exchanged views with the authorities concerned of the Government of the Kyrgyz Republic in order to jointly evaluate the present achievements of the Project.

As a result of the discussions, both sides agreed upon the matters referred to in the documents attached hereto.

Bishkek, March 3, 2008

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Mr. Melis MAMBETJANOV
Permanent Secretary
Ministry of Finance
Kyrgyz Republic

ATTACHED DOCUMENT

JOINT EVALATION REPORT

ON

THE JAPANESE TECHNICAL COOPERATION PROJECT

"IT HUMAN RESOURCE DEVELOPMENT

IN THE KYRGYZ REPUBLIC (NATIONAL IT CENTER)"

March 3, 2008

1. Outline of the Evaluation Study

1-1 Objective of the Final Evaluation of the Project

The Project will be completed at the end of May 2008. Therefore, the Japanese Team was dispatched to the Kyrgyz Republic to conduct the final evaluation of the Project. The Japanese Team and the Kyrgyz Evaluation Team (hereinafter referred to as "the Kyrgyz Team") confirmed the achievement of the Project.

Main objectives of the final evaluation are as follows;

(1) To verify the achievement of the of the Project and the implementation as per the Project plan

(2) To evaluate the Project based on the five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact and Sustainability); and

(3) To make recommendations to the authorities of the both governments concerned with regard to activities for the remaining period of the Project and after the termination of the Project.

1-2 Members of Evaluation Team

(1) The Japanese Team

Mr. Hiroyuki Ide	Team Leader
Mr. Tadao Tamukai	Cooperation Planning
Mr. Atsushi Tokura	Evaluation Analysis

(2) The Kyrgyz Team

Ms. Dinara Uturova	Office of the President
Mr. Erkin Asrandiev	Office of the President
Mr. Akylbek Aidaraliev	Prime Minister Office
Ms. Ainura Mavlyanova	Ministry of Finance
Mr. Atajan Dooranov	Ministry of Transportation and Communication
Mr. Edilbek Moldoev	Ministry of Education and Science
Mr. Almaz Bakenov	National IT Center
Ms. Asel Isaeva	National IT Center

1-3 Method Evaluation

The Project achievements and progress were evaluated using the Project Design Matrix (hereinafter referred to as "PDM"). The evaluators checked the achievement of the inputs, activities, outputs and project purpose according to the current PDM and evaluated progress of the Project using the follow 5 (five) criteria from the Project Cycle Management method (hereinafter referred to as "PCM").

1-3-1Criteria of Evaluation

The five viewpoints of PCM evaluation criteria are:

(1) Relevance

An overall assessment of whether the overall goal and the project purpose are in line with a policy and social needs of the accepting country and policy of the cooperating country in the framework of international partnership or not as well as whether the logical linkages among the overall goal, the project purpose, the outputs and the activities are reasonable or not.

(2) Effectiveness

Measurement of whether the project purpose has been achieved. This is then a question to the degree to which the outputs contribute towards achieving the intended project purpose.

(3) Efficiency

Measurement of productivity of the Project in terms of the total resource inputs against the outputs or the conversion efficiency from the inputs to the outputs.

(4) Impact

The positive and negative changes produced directly and indirectly as the results of the Project.

(5) Sustainability

The overall assessment of the extent to which the positive changes achieved by the Project can be expected to last after the completion of the Project.

1-3-2 Sources of Information

The following sources of information were used in the evaluation study:

(1)Documents agreed by both sides prior to and/or in the course of the project implementation including:

- Record of Discussions (R/D)
- Minutes of Meeting (M/M)
- PDM
- Plan of Operation (PO)
- Others

(2) Record of inputs form both sides and activities of the Project.

(3) Data and statistics which indicate the degree of achievement of the outputs and the project purpose.

(4) Interviews with and questionnaires to the Project's counterpart personnel (hereinafter referred to as "C/P"), Japanese experts, and personnel in related

organizations.

(5) Observations of equipments and facilities, courses and textbook/training materials.

1-3-3 PDM for Evaluation

The current PDM for evaluation used is the PDM revised in March 20, 2007 at the 4th JCC Meeting. PDM is attached in Annex 1.

2. Outline of the Project

2-1 Background of the Project

In 2001, the Kyrgyz government submitted a proposal for a technological cooperation project to Japanese government, requesting assistance in establishing an information technology center that could serve as the base for the activities outlined below.

(1) Diverse training activities (In information technology, software programming, computer technology, etc.)

(2) Distance learning, and

(3) Establishment of a data base system that would consolidate and manage information from fields such as industry, the distribution market and education.

In response to this request, the Japanese government conducted its "Project Formulation Study in IT Sector" in July 2002 to assess Kyrgyzstan's current conditions, trends and needs in the IT field. As a result of this project formation study, the request was accepted in May 2003, and the preparatory evaluation study was carried out to review the relevance of the technical cooperation project, establish the cooperation plan and set the target objectives and project metrics.

Based on the results of the preparatory evaluation study, R/D was signed between the implementation study team and the Kyrgyz authorities concerned in August 2004. As a result, the Project was started in October 2004.

2-2 Summary of the Project

2-2-1Overall Goal

The overall goal of the Project is "High-level IT engineers are sufficiently provided to IT market in the Kyrgyz Republic".

2-2-2 Project Purpose

The project purpose is "NITC functions properly as the training institute of high-level

IT engineers at the end of the Phase Two period".

2-2-3 Outputs

The outputs of the Project Purpose are as follow;

(1) C/Ps 'skill is improved.

(2) Training course curriculum is properly formulated and updated every year.

(3) Facilities and equipment necessary for training are properly prepared.

(4) Training materials and manuals are properly prepared.

(5) Training courses are implemented with an appropriate quality.

(6) Third-country training programs are implemented with an appropriate quality

3. Project Achievement

3-1 Achievement of Input

3-1-1 Japanese Side

(1) Dispatch of the Japanese Experts and Study Teams

Annex 2 shows the record of the dispatch of the Japanese experts and the study teams to date.

JICA decided to outsource the project to a consulting firm. Selection and the dispatch of the consultant firm were delayed due to the complexity of JICA's internal procedures.

(2) Training of the Kyrgyz C/P in Japan

Annex 3 shows the record of training of C/Ps in Japan to date

(3) Provision of Machinery and Equipment

Annex 4 shows the record of provision of machinery and equipment to the Project to date and the equipment carried by the Japanese experts.

(4) Expenses for the Project

Annex 5 shows the expenses of the Project by the Japanese side.

3-1-2 Kyrgyz side

(1) Assignment of C/Ps and Other Staff

Annex 6 shows the assignments of C/Ps and other staff for the Project.

The Project Director was replaced twice. The first Project Director had resigned in

September 2005 and the position had been vacant for a year. By the Presidential Decree issued of January 2007, the Head of Strategic Development and Expertise Department (current name is "Social and Economic Policy Department") of the Office of the President took over as the Project Director.

(2)Expenses for the Project

Annex 7 shows the expenses of the Project by the Kyrgyz side.

According to the R/D, the Kyrgyz government committed itself to providing at least 5 million som annually to the Project during the project period. The actual allocation has been less than 5 million som, 4.38 million in 2004, 4.14 million in 2005 and 4.27 million in 2006.

(3) Machinery and Equipment

Annex 8 shows the project operation space, office space for JICA experts, lecturer rooms and other necessary facilities and equipment in the premises of the National Academy of Science of the Kyrgyz Republic provided by the Kyrgyz side.

3-2 Achievement of Activities

Activities of the Project were implemented as described in the annexes listed below.

- Plan of Operation and its Achievements (Annex 9)
- The Training Course Structure (Annex 10)
- Summary List of Training Courses (Annex 11)
- List of Seminars (Annex 12)
- Third Country Training (Annex 13)

3-3 Achievement of the Output

The following are description of the achievement of each Output based on the indicators in the PDM.

Output 1:	C/Ps' skill is improved.
Indicators:	(1) All instructors can attain a certain high level as confirmed by the Japanese side. (2) 80% of trainees are satisfied with instructors

The Japanese experts concluded that all the C/Ps had gained necessary skills and knowledge as a lecturer. According to the self evaluation titled "Technology Assistance Evaluation", all the C/Ps thought that they had improved their skills and knowledge

enough through the technology transfer activities.

Results of the evaluation by the trainees completed at the end of the training courses revealed that more than 90% of the trainees were very satisfied with the lectures' teaching method and knowledge.

Output 2:	Training course curriculum is properly formulated and updated every year.
Indicators:	(1) All training course curricula are formulated within a year after the Phase starts and updated every year. (2) C/Ps can revise curricula by themselves

A curriculum was formulated within a year after the Phase II started and revised in March and August 2005, February, May and September 2006 and May 2007.

In September 2007, the Japanese experts found that not all the C/Ps had gained enough capacity to develop and modify curricula on their own. However, at the final evaluation in February 2008, the Japanese expert stressed that all the C/Ps has gained enough capacity. In the questionnaire completed at the final evaluation, all the C/Ps showed self-confidence in designing a curriculum.

Output 3:	Facilities and equipment necessary for training are properly prepared.
Indicators:	(1) The register book is revised on a periodical basis.

The joint evaluation team has confirmed that the register of equipment and the record of maintenance are well maintained.

Output 4:	Training materials and manuals are properly prepared.
Indicators:	(1) 80% of trainees are satisfied with training materials. (2) C/Ps can update training materials and manuals by themselves.

The evaluation by the trainees at the end of the training courses showed that 96.3% of the trainees were very satisfied with the training materials.

In September 2007, the Japanese experts concluded that not all the C/Ps had gained enough capacity to develop and modify training materials by themselves. However, at the final evaluation in February 2008, the Japanese expert stressed that all the C/Ps gained enough capacity. In the questionnaire at the final evaluation, all the C/Ps showed self-confidence in updating training materials.

Output 5:	Training courses are implemented with an appropriate quality.
Indicators:	(1) Rate of successfully completed participants for training courses becomes to more than 70% in average during the Project period. (2) More than 80% of trainees are satisfied with the training courses.

During the Phase II of the Project, there were 705 trainees in total and 67.8% of them completed the courses, which is just below the target.

The evaluation by the trainees at the end of the training courses revealed that most of the trainees were very satisfied with the training courses. According to the questionnaire survey in February 2008, all the former trainees who responded were still satisfied with their courses, although the number of respondent was small.

Output 6:	Third-country training programs are implemented with an appropriate quality.

The training for 12 trainees from Kazakhstan, Uzbekistan and Tajikistan was conducted in September 2007. 41.7% of the trainees passed the Windows Server course and the Linux Course. 25% passed the Network Development course, 50% passed the Network Technology course. Six trainees failed to pass any course at all.

Despite the low success rate, the evaluation by the trainees at the end of the training courses showed their high satisfaction.

In conclusion, it is fair to say that the capacity of C/Ps has increased enough and the Center has carried out high-quality training courses. However, the third-country training failed to achieve its goal and revision of the training is necessary.

3-4 Achievement of the Project Purpose

The Project Purpose, which is "the National Information Technology Center functions properly as the training institute of high-level IT engineers at the end of the Phase II" is going to be achieved.

478 trainees in total graduated their courses, which already meets the target figure of 400 defined on PDM. However, only nine of them so far have received a diploma, which is awarded to those who complete a set of mandatory courses in a particular field of IT. The fulfillment ratio to the capacity of 12 participants in each course was just 50.9%. According to the questionnaire survey in February 2008, all the managers

who sent their staff members to the Center for the course thought that it was correct to do so. This is more than the target figure of 80%, although the number of respondent was small. At the end of their courses, the trainees also gave a high score to the question "How do you evaluate the general level of the training organization?". According to the questionnaire survey on the former trainees in February 2008, all the former trainees, although the number of respondent was small, are still satisfied with the Center.

The Center's income from its activities has increased from 342,000 som in 2005 to 2,088,000 in 2007[1]. The figure of 2007 is close to the figure of 2,217,600 som predicted in the R/D. However, it is not enough to cover the cost of operation. The Center becomes sustainable only with the subsidy from the Kyrgyz government.

3-5 Achievement of the Overall Goal

The Overall Goal, or "High-level IT engineers are sufficiently provided to IT market in the Kyrgyz Republic" is certain to be achieved. The number of Center graduates has increased constantly: 114 graduated the course between October 2005 and September 2006, and 217 from those between October 2006 and September 2007. The number of graduates has increased smoothly since October 2007 as well.

In addition, the managers who had sent their staff members to the Center recognized the effectiveness of the training. It is thus fair to say that the Center provided IT engineers with training of sufficient quality.

4. Implementation Process of the Project

Technology transfer

The delay in the dispatch of the Japanese experts from the consulting firm had led to the delay in technology transfer activities. On the other hand, the Kyrgyz side decided to start the training courses as planned to secure income. Therefore, some C/Ps did not have enough time to receive technology transfer. However, due to the efforts of both sides, the C/Ps gained enough skills and knowledge through lectures from the Japanese experts. According to the questionnaire survey in February 2008, all the lectures and the assistant lecturers of the Center thought that the technology transfer activities were adequate in terms of the Japanese experts' expertise, number of the experts, duration and timing.

[1] Between January to September 2007

Ownership and motivation

The lecturers and the assistant lectures are highly motivated to learn new technology. They mentioned in the interviews at the final evaluation that their major reason to work for the Center was to access new technology. They are also willing to introduce new courses beyond the project's scope such as a CISCO Academy course. Their ownership of the Center's management is also expected to be increased towards the future development of the Center.

The final evaluation showed that some C/Ps' motivation decreased. One of the reasons may be their salary, which is lower compared to that of IT engineers in the private sector. Another reason could be communication problems between the lecturers and the management.

Monitoring

The Joint Coordination Committee (JCC) was held four times: in March 2005, February and October 2006, and March 2007. In the JCC, progress of project activities was presented and issues were shared among the participants.

Monthly reports are submitted by the Project Manager in English and by the Japanese experts in Japanese. The Project Manager attends a monthly meeting with the JICA Kyrgyz Office.

Outsourcing

The Japanese experts from the consulting firm reportedly implemented the activities efficiently to achieve the targets. The Japanese experts submitted a progress report on a regular basis, and communication among the experts, C/Ps and the JICA was well facilitated.

Others

External audit on the Center was conducted in January 2006, and the Center received good marks from the auditor. Internal control is thus effective at the Center.

5. Evaluation

5-1 Relevance

It is fair to say that the overall relevance of the Project is still high. Details are as follows.

Relevance of the Project to the Kyrgyz government's policy

The "National Strategy: Information and Communication Technologies for Development in the Kyrgyz Republic" of 2002 has not been replaced even after the revolution. One of the three major priorities of the strategy is "Education-human capacity building and training of staff in ICT". The "Country Development Strategy 2007-2010" stresses the importance of IT usage.

Relevance of the Project to the target group

At the mid-term evaluation, the target group was changed from "Graduates from universities and engineers" to "Potential and currently working IT engineers". Interviews with graduates of the training courses and IT companies at the final evaluation revealed that the project was highly relevant to their needs and the Center was recognized as the only high-level IT training institute in the country. Records of the Center showed that patterns of attendance in its training changed. Attendance of IT engineers from IT companies significantly increased in 2007. It shows that the Center is becoming well recognized as an IT training institution among IT companies.

Relevance of the Project to the Japan's aid policy

According to Japan's Country Assistance Strategy for the Kyrgyz Republic, one of the main assistance fields is human resource development towards market-oriented economic reform. The strategy regarded the Center as the hub for IT human resource development for the country and the region. JICA's Country Assistance Plan[2] also stresses the importance of human resource development towards market-oriented economic reform. The plan expects the Center to produce IT engineers who can contribute to private sector development. The Project is thus relevant to the Japan's aid policy.

Relevance of the Project to Japan's comparative advantage

JICA has a comparative advantage in IT human resource development, as it has conducted similar projects in many countries. An issue is how to secure appropriate persons to dispatch in such undertaking. JICA managed to secure human resources this time in Japan by outsourcing the Project's activities to the Japanese consulting firm.

5-2 Effectiveness

[2] It is still a draft as of February 2008.

Overall, the effectiveness of the Project is relatively high, although some factors hinder the achievement of the Project Purpose.

Probability of achieving the project purpose

As mentioned before, the Project Purpose will be achieved if the Kyrgyz government provides a subsidy as planned.

Factors that hinder the achievement of the project purpose

There are factors inhibiting the achievement of the Project Purpose as follows;

- ✓ Mid-term management and financial plan has not been formulated.
- ✓ PR activities on the training courses have not been sufficient due to lack of financial and human resources. The number of trainees can be increased by introducing aggressive promotion activities.
- ✓ Communication between the Project Director and the Center staff has not been encouraged as expected.

5-3 Efficiency

The efficiency of the Project is relatively high and has slightly improved since the mid-term evaluation, as the number of courses and trainees has increased since then.

Dispatch of the Japanese experts

The delay in selection of the consulting firm and its dispatch negatively affected the schedule for technology transfer and implementation of training courses. However, the delay in activities was kept to a minimum due to efforts of the Japanese experts, and the achievement of Outputs has not been affected. Absence of the Japanese Coordinator since October 2006 has not caused a significant negative impact. The Office Manager of the Center and the JICA Kyrgyz Office took over the activities smoothly

Provision of machinery and equipment

Most of the machinery and equipment pieces were delivered according to schedule. A few equipment pieces such as bookbinder machines and a DVD video camera were not utilized.

Counterpart personnel allocation

As mentioned before, the Project Director was replaced twice and the position had been vacant for a while. Two managers and two lecturers quit during the project period.

Otherwise C/Ps and other staff were adequately assigned. If a staff member dedicated to PR activities were recruited, the Center would have gathered more trainees.

Training in Japan

All the participants in the training in Japan thought that the training was useful and positively affected their attitude.

Other

The fulfillment ratio to the capacity of 12 participants in each course was not high: 50.9%. If the ratio improves, so will the Center's income and the efficiency of the Project.

5-4 Impact

The Project has had a certain positive impact, and does not seem to have caused any negative impact.

Probability of achieving the overall goal

The Project is likely to achieve the Overall Goal, or "High-level IT engineers are sufficiently provided to the IT market in the Kyrgyz Republic". The number of graduates from the Center has constantly increased. In addition, the quality of the training courses is appreciated by the companies and organizations that have sent their staff to the training courses.

The Kyrgyz IT market is so small and underdeveloped at the present that it is easy to provide sufficient IT engineers to it. If the Center manages to develop the IT market further while providing qualified IT engineers, then the Project will have a greater positive impact.

Economic impact

According to the questionnaire survey at the final evaluation, graduates feel that they have improved their work performance because of the training course. Some managers that assigned trainees to the Center recognize that their staff members have improved their productivity and quality of work since the courses. Some IT-related projects supported by other donors have also sent their staff to the Center's training courses. It is thus fair to say that the Project will have a positive impact on prosperity of enterprises and projects in the Kyrgyz Republic, and a positive economic impact will spread to the region if the Center continues the third-country training.

Other impacts

Number of female trainee is 137, 19.2% of total. The Center has introduced some basic IT courses and nearly half of former trainees are female. The Project will have a positive impact on gender aspects.

5-5 Sustainability

The Project is evaluated as still having vulnerabilities, although its financial sustainability has improved since the mid-term evaluation. To increase the Project's sustainability, several measures should be taken.

Institutional and personnel aspects

The organizational structure is already established at the Center as shown in Annex 14. However, as mentioned before, recruitment of a marketing and promotion member is desirable. The Project has introduced several extended activities beyond its scope. For instance, the Center is now recognized as an official CISCO and ORACLE training institution, and TOEFL and Pearson Vue examination institution. This is very good for the Project's sustainability. Other donors such as the European Bank for Reconstruction and Development have already approached the Center for future cooperation. This is also positive news for the Project.

Developing a midterm management and financial plan has been an issue. JICA presented the guideline for the formulation of a management plan and dispatched the Japanese expert for Management Plan and Financial Strategy in October 2007. Although the Project Manager drafted a management plan, it has not been shared among the stakeholders.

Some staff members seem to have been demoralized due to a few reasons including the low level of their salary compared to IT engineers of the private sector. Their motivation would decrease further after the end of the Project, as they have no chance to receive technology transfer from the Japanese experts. Some of them may even leave the Center from now on.

The Project has been supported by the Kyrgyz government. However, to increase its sustainability, the Center needs concrete support measures from the government in addition to the subsidy. The Center is required to pay income tax and duty although it is a public educational institution. The Center's right to use the premises of the

National Academy of Science will also be terminated in May 2009. The Center needs assistance from the Kyrgyz government to address such issues.

Financial aspects

The Center is sustainable with the government subsidy. A Japanese expert analyzed in October 2007 that the Center can survive with the subsidy from the government and collected tuition fees of more than 2 million som a year, although depreciation of its machinery and equipment is not taken into consideration. As the Center managed to collect more than 2 million som in 2007 and the Kyrgyz government will provide the subsidy of 3 million som annually till 2011 by the Presidential Decree of January 2008, its financial sustainability is secured. If the Decree is changed for the worse, the Center will not be sustainable.

6. Conclusion and Recommendations

6-1 Conclusion of the Evaluation

The project purpose is going to be achieved. The relevance of the Project is high, and the effectiveness and efficiency of the Project is also relatively high. Certain positive impacts from the Project have been observed. However, its sustainability is still in doubt.

Both the Kyrgyz and Japanese Teams conclude that some action should be taken to ensure the achievement and the sustainability and the Project should have continuous support from the Kyrgyz government and JICA even after the end of the project period.

6-2 Recommendations

Based on the conclusion above, both teams recommend the following measures.

- ✓ More extended activities should be considered. The Center should extend its activities to new business domain, such as software development, incubation of IT entrepreneurs, and IT policy advice (See Annex 15). If the IT service industry is promoted by new activities, demand for IT training and the Center's income will increase.
- ✓ The Center should align its activities to the Country Development Strategy. The strategy stresses provision of information and communication services to the population on the entire territory of the country. By contributing to the realization of the strategy, the mission of the Center will be significant.

- ✓ Management and financial plan for the Center should be formulated and authorized by the stakeholders, while considering new activities.
- ✓ A marketing and promotion staff should be recruited. Promotion means not only newspaper and TV advertisement but also cooperation with the private sector and universities.
- ✓ The roles of the Project Director should be clarified. To secure cooperation of the Ministries, the Project Director can play a significant role.
- ✓ Revision of the third country training is necessary. Experience from the first year suggests that trainees should be carefully selected according to their skill level.
- ✓ Communication between the lecturers and the management should be promoted. Firstly, all lecturers and assistant lecturers should attend the weekly meeting. They should share the future direction of the Center and work together to extend the Center's activities.
- ✓ The Center should start discussion with the National Academy of Science to extend its right to use the premises of the Academy. Both teams strongly request to extend the Center's right

6-3 Lessons Learned

Assistance for management

Both the Kyrgyz government and JICA have mainly supported technology transfer activities to increase C/Ps capacity. However, the management capacity of the Center should have received more attention, as institutional capacity is crucial for the Project's sustainability. When a new training institute is established under project, activities to strengthen its management capacity should start from the beginning of the project period.

Self-sustainability in finance

The National IT Center is a public training institute and is not required to be self-financed like private firms. When a new entity is established under a project, there should be a consensus among stakeholders how far the entity is expected to be self-sustainable.

Flexibility of the training courses

When the IT service market is small and premature, demand for training could be volatile. The design of the training courses should be flexible to meet the actual demand.

7. Future Cooperation

Both teams confirmed, to ensure IT industry development, several activities should be introduced. While the Center is being recognized as a high level IT training institute, the Center should extend its activities to the new business domain, such as software development and incubation of IT entrepreneurs (See Annex). Both teams requested that the current staff would stay in the Center and contribute to the extension of the Center's activities and the Center would be able to use the premises of the National Academy of Science. The Kyrgyz Team requested JICA's continuously assistance, and the Japanese Team understood it.

List of Annexes

Annex 1 : Project Design Matrix

IT Human Resources Development Project in the Kyrgyz Republic (National IT Center) Phase 1

Target Group: Center staff Target area: National IT Center Duration: 2years (maximum) **(August 12, 2004)**

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal N/A	N/A	N/A	
Project Purpose The National IT Center has an organization and resources to receive full-scale technology transfer from JICA.	1. The Kyrgyz government executes required resource input according to the plan, such as the appointment/recruitment of the center's key personnel, improvement of the project site, and allocation of grant 2. Various requirements for healthy financial management of the center are fulfilled, such as tax exemption, continuous allocation of grant, and incorporation of training fee revenue into the center's operation budget. ※ Once these goals are accomplished, Phase 2 will commence and unfinished activities at the time will continue under the new phase.	Survey implemented by the JICA Kyrgyz Office	
Output 1. An institution and a system for project management is established. 2. The technology transfer process from JICA experts to Kyrgyz instructors is established. 3. The recruitment process for trainees is established. 4. Staff of the Kyrgyz counterpart understands application procedures relating to JICA's technical assistance. 5. Technological advancement and market changes are studied and understood.	1. Qualified key personnel is appointed (general manager, training manager, and six instructors). 2. Manual for process of technology transfer is made by the end of the Phase 1. 3-1. Report on the number of potential trainees is made to form the basis of determining course capacity. 3-2. Manual for recruiting trainees (schedule, promotion, application, and selection) is made by the end of Phase 1. 4. Manuals for required JICA application forms (A1, A2, A3 and A4) are made.	1. Monitoring report of the project 2. Manual of technology transfer 3-1) Report on IT market research 3-2) Procedure manual for recruitment 4. The application form for Phase 2 made by the Kyrgyz	Retention of the center's IT experts by securing the level of compensation equivalent to the private sector IT policies in the Kyrgyz Republic are not changed

6. Facilities and equipment necessary for training are properly prepared.	5. Prior to the start of Phase 2, necessary modification is made to the project document (including the PDM for Phase 2). 6. The register book is updated on a periodical basis.	side 5. Revised project document 6. Register book	
Activities 1-1) To appoint and assign general manager, administrative and technical staff. 1-2) To prepare terms of references for each staff. 1-3) To develop an operating budget and an activity plan for each section. 1-4) To monitor progress of activities and budget execution 2-1) To execute technology transfer from experts (short-term) to Kyrgyz instructors and prepare curriculums, textbooks, teaching aid and teacher's manuals. 2-2) To conduct short-term courses. 2-3) To identify and compile areas of improvement in a report. 3-1) To visit and survey universities, IT companies and other organizations to estimate potential demand 3-2) To promote the center and its activities. 3-3) To open a Web site 3-4) To develop a recruiting method, apply it to the short-term courses, and prepare a recruitment manual and course guide. 4-1) To provide support by JICA experts for the counterpart's staff with regard to application for the short-term assignment of experts, provision of equipment, and training. 5-1) To study technological advancement and market changes.	Inputs Kyrgyz side 1. Counterparts (Project Director, Project Manager, Manager on Teaching Program, Six Instructors)、Other staff 2. Renovated facilities with necessary equipment 3. Annual budget: 5 million soms Japanese side 1. 2 Long term experts (Chief advisor and Coordinator) 2 years * JICA may send a short-term expert instead of the Chief advisor according to the situation. 2. 2 Short term experts (Database and Network) 2 m/m in the Kyrgyz Republic 3. Equipment required for short term courses 4. Training in Japan (Project Director, Project Manager and Manager on Teaching Program)		Precondition The provision of necessary support by the Kyrgyz governments, including budget allocation. Related entities' cooperation is secured.

5-2) To organize a symposium with IT companies, IT training institutes and other organizations in the field of trends of state of the arts IT technology for needs survey. 6-1) To procure equipment and software. 6-2) To develop inventory system for equipment and make a register book 6-3) To operate equipment and perform maintenance.		

Revised Project Design Matrix (Revised on March 20, 2007 at the 4th JCC Meeting)

IT Human Resources Development Project in the Kyrgyz Republic (National IT Center) Phase 2

Target Group: Potential and currently working IT engineers Target Area: Whole Kyrgyz Republic Duration: 3 years

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goals High-level IT engineers are sufficiently provided to IT market in the Kyrgyz Republic.	1. The number of graduates from NITC constantly increases compared to the previous year.	Records of graduates at the Center	
Project Purpose National Information Technology Center ("the Center") functions properly as the training institute of high-level IT engineers at the end of the Phase Two period.	1. More than 420 are graduated from NITC courses (400 for short-term courses and 20 for Diploma courses) during the Project period 2. More than 75% of employers who send trainees are satisfied with increased ability of graduates from the Center. 3. More than 80% of trainees are satisfied with the Center. 4. The Center becomes self-sustainable in financial term.	1. Records of graduates of the Center 2. Survey results implemented by the Center 3. Survey results implemented by the Center 4. Financial document of the Center	1. The general economic conditions do not deteriorate. 2. The Kyrgyz government does not change IT policies 3. The brain drain of IT engineers is confined within certain levels
Outputs 1. C/Ps ' skill is improved. 2. Training course curriculum is properly formulated and updated every year. 3. Facilities and equipment necessary for training are properly prepared. 4. Training materials and manuals are properly prepared. 5. Training courses are implemented with an appropriate quality. 6. Third-Country Training Programs are implemented with an	1-1) All instructors can attain a certain high level as confirmed by the Japanese side. 1-2) 80% of trainees are satisfied with instructors. 2-1) All training course curricula are formulated within a year after the Phase 2 starts and updated every year. 2-2) C/Ps can revise curricula by themselves. 3. The register book is revised on a periodical basis.	1-1. Records of experts activities 1-2. Results of participants' evaluation at the end of the courses 2-1. Record of the Center's activity 2-2. Record of the Center's activity, Records of experts' activities 3. Register book	Those completing training are given prestigious certificates.

appropriate quality.	4-1) 80% of trainees is satisfied with training materials. 4-2) C/Ps can update training materials and manuals by themselves. 5-1) Rate of successfully completed participants for training courses becomes to more than 70% in average during the Project period. 5-2) More than 80% of trainees are satisfied with the training courses.	4-1. Results of participants' evaluation at the end of the courses 4-2. Records of the Center's activity, Records of experts' activities 5-1. Records of the Center's activity 5-2. Results of participants' evaluation at the end of the courses	
Activities 1-1) To formulate the technology transfer plan 1-2) To conduct technology transfer from the Japanese side to the Kyrgyz C/Ps by means of lectures and practice 2-1) To conduct detailed training needs assessment 2-2) To formulate the training course curricula 2-3) To update training course curricula 3-1) To make the list of equipment and course related software necessary for training 3-2) To procure and install equipment and course-related software 3-3) To update the register book 3-4) To operate equipment and conduct maintenance of equipment 4-1) To formulate materials (textbook, teaching aid and teacher's manual) 4-2) To prepare materials (textbook, teaching aid and teacher's manual) 4-3) To update materials (textbook, teaching aid and teacher's manual 5-1) To prepare course guide and application brochures 5-2) To carry out recruitment activities of prospective trainees	Inputs Kyrgyz side 1. Counterparts (Project Director, Project Manager, Manager on Teaching Program, Six Instructors)、Other staff 2. Renovated facilities with necessary equipment 3. Annual budget: more than 5 million soms Japanese side 1. Long term experts (Team Leader, Coordinator) 2. Short term experts (IT education, Operating System, Development Language, Network Development, DBMS and Database Development, System Development techniques, Business Knowledge, Organizing Seminar) 3. Equipment required for courses 4. Training in Japan		The Project's C/Ps from the Kyrgyz side remain at the Center. Precondition The Phase 1 of the Project is completed.

5-3) To conduct training 5-4) To conduct various symposium when it is necessary 5-5) To conduct evaluation of training courses regularly including questionnaires for trainees and their employers 5-6) To improve training courses regularly 5-7) To implement public relations activities 5-8) To carry out administrative, financial and clerical work 5-9) To conduct monitoring of the Project 6-1) To support implementing Third-Country Training Program.		

Annex2. Dispatch of Japanese Experts and Study Teams

Japanese Experts

Expertise in charge	Name	Period
DBMS and Database Development	Mr. Yasumitsu Ishikawa	2004.11.29 - 2004.12.28
Network Development	Mr. Takeshi Sasahara	2004.11.29 - 2004.12.28
Chief Advisor	Mr.Hiroyuki Ide	2005.3.15 - 2005.3.30
Project Coordinator	Mr. Tomonori Orita	2004.11.21 - 2006.11.20
Team Leader/IT Education	Mr. Masamichi Iwamoto	2005.9.5 - 2006.3.9
(ditto)	Mr. Masamichi Iwamoto	2006.5.3 - 2006.11.28
(ditto)	Mr. Masamichi Iwamoto	2007.1.10 - 2007.3.8
Team Leader/IT Education, Third Country Training	Mr. Masamichi Iwamoto	2007.5.2 - 2007.6.26
(ditto)	Mr. Masamichi Iwamoto	2007.8.22 - 2007.10.2
(ditto)	Mr. Masamichi Iwamoto	2008.2.13 - 2008.3.11
Deputy Team Leader/DBMS and Database Development	Mr. Yasumitsu Ishikawa	2005.10.10 - 2005.11.1
(ditto)	Mr. Yasumitsu Ishikawa	2006.1.25 - 2006.2.23
Deputy Team Leader/DBMS and Database Development, Development Language for Software	Mr. Yasumitsu Ishikawa	2006.8.2 - 2006.9.12
(ditto)	Mr. Yasumitsu Ishikawa	2007.1.31 - 2007.3.8
(ditto)	Mr. Yasumitsu Ishikawa	2007.9.26 - 2007.11.6
Operating System	Mr. Makoto Nakayama	2005.10.31 - 2005.12.1
Communication/Network Development	Mr. Takeshi Sasahara	2005.12.1 - 2006.2.14
Network Development	Mr. Takeshi Sasahara	2006.7.26 - 2006.9.28
(ditto)	Mr. Takeshi Sasahara	2007.10.31 - 2007.11.27
Development Language for Software Development	Ms. Yuko Shiraishi	2005.12.1 - 2006.2.23
System Development Technique	Mr. Yoichi Kogure	2005.10.17 - 2005.12.13
Open Source, System Development Technique	Mr. Yoichi Kogure	2006.8.14 - 2006.10.19
Open Source, System Development Technique, Business Knowledge in Various Fields	Mr. Yoichi Kogure	2007.8.1 - 2007.9.11
Business Knowledge in Various Fields	Mr. Takao Hayashi	2005.10.3 - 2005.10.25
(ditto)	Ms. Kiyomi Eguma	2006.8.14 - 2006.9.12
Management Plan, Financial Strategy	Mr. Noboru Utaka	2007.5.23 - 2007.6.12
(ditto)	Mr. Noboru Utaka	2007.10.3 - 2007.10.23
Marketing	Mr. Hiroshi Imai	2007.5.23 - 2007.6.12

Mid-term Evaluation Team

Expertise in charge	Name	Period
Leader	Mr. Yoshio Niizeki	2006.10.2 - 2006.10.13
Project Management	Mr. Tadao Tamukai	2006.10.2 - 2006.10.13
Evaluation Analysis	Mr. Nobuhisa Iwase	2006.9.25 - 2006.10.13

Consultation Team

Expertise in charge	Name	Period
Leader	Mr. Yoshio Niizeki	2007.7.2 - 2007.7.12
Project Management	Mr. Tadao Tamukai	2007.7.2 - 2007.7.12

Annex 3. Training of the Kyrgyz C/Ps in Japan

Field of Training	Name	Period
Training center management	Mr. Karabek Uzakbaev	2004.11.9 - 2004.11.27
(ditto)	Mr. Almaz Bakenove	2004.11.9 - 2004.11.27
(ditto)	Mr. Evgeni Korotovskih	2004.11.9 - 2004.11.27
Software Development	Mr. Ulan Sydykbaev	2005.11.2 - 2005.11.27
(ditto)	Mr. Jumabek uulu Zarlyk	2005.11.2 - 2005.11.27
(ditto)	Ms. Mira Toktoralieva	2006.7.4 - 2006.7.30
(ditto)	Mr. Azamat Mukanov	2006.7.4 - 2006.7.30
(ditto)	Mr. Talant Asankojoev	2006.7.4 - 2006.7.30
(ditto)	Mr. Mirbek Nosinov	2006.7.6 - 2006.7.30
Security	Mr. Jumabek uulu Zarlyk	2007.7.7 - 2007.7.29
(ditto)	Mr. Azamat Askerovich Mukanov	2007.7.7 - 2007.7.29
IT service indusrty development	Mr. Almaz Bakenov	2007.12.10 - 2007.12.22

Annex4. List of Machinery and Equipment Provided by the Japanese Side and the Carried by the Japanese Experts

Item	Number
Desktop PC with LCD monitor	100
Notebook PC	26
Server computer	4
Printer	11
Network router & switch	50
UPS	48
Overhead projector	6
Books	406
Copy machine	2
Air conditioner	20
Generator	3
Software(e.g. Microsoft, Oracle, Adobe)	Necessary number of licenses
Other equipment (e.g. PC desk & chair, Digital video recorder, Security monitoring	Necessary number of sets

Annex 5. Expenses for the Project by the Japanese Side

JFY	2003	41,536,000 JPY(Japanese Yen)
JFY	2004	92,593,000 JPY
JFY	2005	161,358,000 JPY
JFY	2006	120,276,000 JPY
JFY	2007	72,156,000 JPY
JFY	2008	6,000,000 JPY (Plan)
	Total	493,919,000 JPY

JFY: Japanese Fiscal Year (April-March)

Annex 6 Assignment of C/Ps and other staff

Position	Name	hired date	Categories						remarks
			OS	DB	NW	DL	SD	OP	
Proj Director	Uzakbaev	2004/ 10	—	—	—	—	—	—	2005/9 retire
	Ukulov	2006/10	—	—	—	—	—	—	2007/4 retire
	Dikambaev	2007/4	—	—	—	—	—	—	
Proj Manager	Almaz	2004/ 10					Sub		
Educ. mgr	Mira	2004/ 10							2006/10 retire
	Asel	2006/10							
Office mgr	Natasha	2005/ 4							2005/12 retire
	Esenai	2006/10							
Lecture	Seyek	2005/ 1	—	—	—	—	—	—	2006/1retire
	Ulan	2004/ 11		Lec		Mir			
	Mirbek	2005/ 3		Mir		Lec			
	Zarlyk	2004/ 11			Mir			Lec	
	Azamat	2005/ 3	Mir		Lec				
	Meder	2005/ 10					Lec		
	Marat	2005/ 3	—	—	—	—	—	—	2005/10 retire
	Emil	2006/7	Lec						
Assistant Lecture	Alexey	2005/ 2							200/9 retire
	Talant	2005/ 7		Ass		Ass			
	Evgeni	2004/ 10							
	Tachiana	2005/ 8	Ass		Ass				2005/8 retire
	Bakyt	2005/ 2	—	—	—	—	—	—	2005/10 retire
	Nazgul	2005/ 2	—	—	—	—	—	—	2005/11 retire
	Kanat	2006/1	—	—	—	—	—	—	System admin 2007/11 retire
	Altynbek	2007/08		Ass	–	–	--	–	
	Burul	2007/09	–	–	–	Ass	–	–	
	Valera	2007/09	–	–	–	Ass	–	–	
	Altynbek	2006/10	–	—	Ass	–	–	–	2007/11 retire
	Nurbek	2007/01	Ass	–	–	–	–	–	
Admin staff	Nazgul	2005/ 1	—	—	—	—	—	—	Accountant
	Gulnara	2005/ 5	—	—	—	—	—	—	Casher
	Talgat	2004/ 12	—	—	—	—	—	—	2005/4 retire

Annex 7. Plan and Results of NITC Budget*

(1,000 Kyrgyz Soms)

	Year (Calendar)		2004		2005		2006		2007	
			Approved	Actual	Approved	Actual	Approved	Actual***	Approved	Actual***
TOTAL NITC	Income	Government Subsidy	4,703	4,384	4,014	4,146	4,672	4,274	4,037	3,630
		Project (Tuition Fee)	–	0	–	0	–	1,156	–	2,088
		Extended Activities at NITC**	–	0	–	0	–	0	–	0
		Total	**4,703**	**4,384**	–	**4,146**	**4,672**	**5,430**	**4,037**	**5,719**
	Expense	for Government Subsidy	4,703	4,384	4,014	4,146	4,672	4,274	4,037	3,630
		Salary	0	353	1,672	1,654	0	1,968	0	1,950
		Social Fund Tax	0	88	392	392	0	410	0	399
		Capital repair	0	2,390	1,638	1,789	0	309	0	0
		Equipment	0	1,080	6	6	0	396	0	0
		Transportation	0	0	46	46	0	108	0	230
		Others	0	473	226	216	0	976	0	945
		Business trip	0	0	0	0	0	1	0	0
		Communication	0	0	0	10	0	32	0	58
		Utility (Elec., etc.)	0	0	35	35	0	75	0	49
		for Project activities	–	0	–	0	–	315	–	1,557
		Payment for staff	–	0	–	0	–	229	–	1,219
		Social Fund Tax	–	0	–	0	–	48	–	249
		Maintenance	–	0	–	0	–	0	–	32
		Food	–	0	–	0	–	0	–	57
		Income Tax	–	0	–	0	–	0	–	
		Others	–	0	–	0	–	38	–	
Net Surplus (Net Deficit)		**Total**	**4,703**	**4,384**	**4,014**	**4,146**	**4,672**	**4,589**	**4,037**	**5,188**
		Single Year	–	0	–	0	–	841	–	531
		Accumulated Base	–	0	–	0	–	–	–	–

Note: (1) *: <u>This Table is not an official budget statement of NITC.</u> The table filled with some estimations by the Japanese Evaluation Team was made for initial assessment and analysis in order to understand the basic financial situation of NITC as a whole. Some figures might be incorrect, particularly by the standard of the Kyrgyz accounting system.

(2) **: "Extended Activities" are such "IT literacy training courses" that are not directly involved to the Project scope which aims at developing "High-level IT engineers" but activities that can contribute to achieving Project purposes indirectly as well as increasing utilization of NITC's capabilities and revenue

(3) ***: Figures on this row show the accumulated amount from January to September (only 9 months) in 2006. Figures of revenue for the Project activities covers from January to only June, while expenses for the same covers from January to only August.

(4) In addition to those figure on the Table, some extra budget was supplied for the Project operation by the Japanese side as local expenses needed for activities mainly by the Japanese experts.

Annex 8. List of Machinery and Equipment by the Kyrgyz Side

No	Name	Number	Amount in som
1	Tables	100	594,119
2	Chairs and armchairs	134	348,366
3	Shelves and cabinets	66	384,789
4	Venetian blinds	264,3 m²	126,654
5	Safe case	2	45,871
6	Tea pots and coffee maker	5	9,677
7	Glassware and dishes	122	9,106
8	Fire prevention equipment	32	43,604
9	Phone equipment	11	51,876
10	Hardware parts	21	80,747
11	Carpets and rags	53,500m	30,558
12	Household appliances (refrigerator, v.cleaner, etc)	5	50,620
13	Office appliances (book binder, stitcher, etc)	8	26,723
16	Other stuff	13	22,751
		TOTAL	1,825,461

Annex 9. Plan of Operation and its Achievements

Note: X means daily basis and short term activities. The doted line means continuously but not daily basis activities.

Phase Two

Actual (2005/6/1 to 2008/5/E: 3 years)

Output 1 : C/Ps ' skill is improved.

* F.Y. is the Japanese Fiscal Year between April 1 to March 31.

Activities	Results	Plan												Person in charge
		2005 (F.Y.)				2006(F.Y.)				2007 (F.Y.)				
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
1-1. To formulate the technology transfer plan (mainly for instructors)	Plan of technology transfer	X	X											Japanese experts
1-2. To conduct technology transfer from the Japanese side to the Kyrgyz C/Ps by means of lectures and practice.	Manual of technology transfer													Japanese experts, Kyrgyz C/Ps
Operating System Business Knowledge, Organizing Seminar (Additional category LAMP)			→	→			→							
Development Language			→	→			→					→	→	
Network Development		→	→	→			→						→	
DBMS and Database Development		→	→	→			→					→	→	
System Development techniques			→	→			→						→	
Business knowledge (2005 3Q: Business Knowledge TA) (2006 2Q: PM workshop TA)			→	→			→						→	
Marketing/Management											→	→		

Output 2: Training course curriculum is properly formulated and updated every year

Activities	Results	Plan												Person in charge
		2005 (F.Y.)				2006(F.Y.)				2007 (F.Y.)				
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
2-1. To conduct detailed training needs assessment	Result of needs analysis	→			→	→			→				→	Japanese experts, Kyrgyz C/Ps
2-2. To formulate the training course curricula	Curricula													Japanese experts, Kyrgyz C/Ps
(Long term courses) (Long term courses structure was changed)														
Long term course (1)		→												
Long term course (2)		→												
Long term course (3)						→								
(Short term courses)														
DBMS and Database Management course[1] (Revised to Oracle / MS-SQL)				→										
Communication and Network Dev course[2] (Revised to NW Dev / NW Tech)				→										
Business knowledge in various fields (Business knowledge course was cancelled)				→										
Basic business processes				→										
Common business practice				→										
PM (System analyst and PM training)				→	→									
OS (Unix/Linux)				→										
SD (SD / Java / C#)				→										
LAMP							→							
Workshop (NW, SD x 2)				→										
Web Design												→		
2-3. To update training course curricula	Manual for revising curriculum				- - -		→		- - -				- - -	

[1] Review of the curriculum will be done because the course will be introduced during the Phase 1.

[2] Review of the curriculum will be done because the course will be introduced during the Phase 1.

Output 3: Facilities and equipment necessary for training are properly prepared.

Activities	Results	Plan												Person in charge
		2005 (F.Y.)				2006(F.Y.)				2007 (F.Y.)				
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
3-1. To make the list of equipment and course related software necessary for training.	List of equipment and software	X												Japanese experts, Kyrgyz C/Ps
3-2. To procure and install equipment and course-related software.			→	→										Japanese side
3-3. To update the register book.	The register book		→	→	→	→	→	→	→	→	→	→	→	Japanese experts, Kyrgyz C/Ps
3-4. To operate equipments and conduct maintenance of equipment.	Equipments operation and maintenance manual			→	→	→	→	→						Kyrgyz side

Output 4: Training materials and manuals are properly prepared.

Activity	Results	Plan												Person in charge
		2005 (F.Y.)				2006(F.Y.)				2007 (F.Y.)				
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
4-1. To formulate materials (textbook, teaching aid and teacher's manual)	Draft of textbook, teaching aid, teacher's guide													Japanese experts, Kyrgyz C/Ps
(Long term courses) (long term courses structure was changes)														
Long term course (1)		→												
Long term course (2)		→												
Long term course (3)						→								
(Short term courses)														
DBMS and Database Management course[3] (Revised to Oracle / MS-SQL)				→							→		→	
Communication and Network Dev course[4] (Revised to NW Dev / NW Tech)				→										
Business knowledge in various fields (Business knowledge course was cancelled)				→										
Basic business processes				→										
Common business practice				→										
PM (System analyst and PM training)				→	→									
OS (Unix/Linux)				→									→	
SD (SD / Java / C#)				→							→		→	
LAMP							→							
Workshop (NW, SD x 2)				→										
Web Design												→		
4-2. To prepare materials (textbook, teaching aid and teacher's manual)	textbook, teaching aid, teacher's guide													Japanese experts, Kyrgyz C/Ps

[3] Review of the curriculum will be done because the course will be introduced during the Phase 1.

[4] Review of the curriculum will be done because the course will be introduced during the Phase 1.

(Long term courses) (long term courses structure was changes)														
Long term course (1)			→											
Long term course (2)			→											
Long term course (3)							→							
(Short term courses)														
DBMS and Database Management course[5] (Revised to Oracle / MS-SQL)				→										
Communication and Network Dev course[6] (Revised to NW Dev / NW Tech)				→										
Business knowledge in various fields (Business knowledge course was cancelled)				→										
Basic business processes				→										
Common business practice				→										
PM (System analyst and PM training)				→										
OS (Unix/Linux)				→										
SD (SD / Java / C#)				→										
LAMP							→							
Workshop (NW, SD x 2)				→										
4-3. To update materials (textbook, teaching aid and teacher's manual)	Updated textbook, teaching aid, teacher's guide						→							Japanese experts, Kyrgyz C/Ps

[5] Review of the curriculum will be done because the course will be introduced during the Phase 1.

[6] Review of the curriculum will be done because the course will be introduced during the Phase 1.

Output 5: Training courses are smoothly implemented.

Activity	Results	Plan												Person in charge
		2005 (F.Y.)				2006(F.Y.)				2007 (F.Y.)				
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
5-1. To prepare course guide and application brochures	Course guide													Japanese experts, Kyrgyz C/Ps
Long term courses (long term courses structure was changes)		→				→								
Short term courses (All courses without LAMP)		→		→										
5-2. To carry out recruitment activities of prospective trainees														Kyrgyz side
Long term courses (long term courses structure was changes)			→				→				→			
Short term courses					→				→				→	
5-3. To conduct training														Kyrgyz side
(Long term courses) (long term courses structure was changes)														
Long term course (1)			→	→	→		→	→	→		→	→	→	
Long term course (2)			→	→	→		→	→	→		→	→	→	
Long term course (3)							→	→	→		→	→	→	
(Short term courses)														
DBMS and Database Management course[7] (Revised to Oracle / MS-SQL)		XXX			XXX	XX								
Communication and Network Dev course[8] (Revised to NW Dev / NW Tech)		XXX			X	XX								
Business knowledge in various fields (Business knowledge course was cancelled)														
Basic business processes														
Common business practice					→				→				→	

[7] Review of the curriculum will be done because the course will be introduced during the Phase 1.

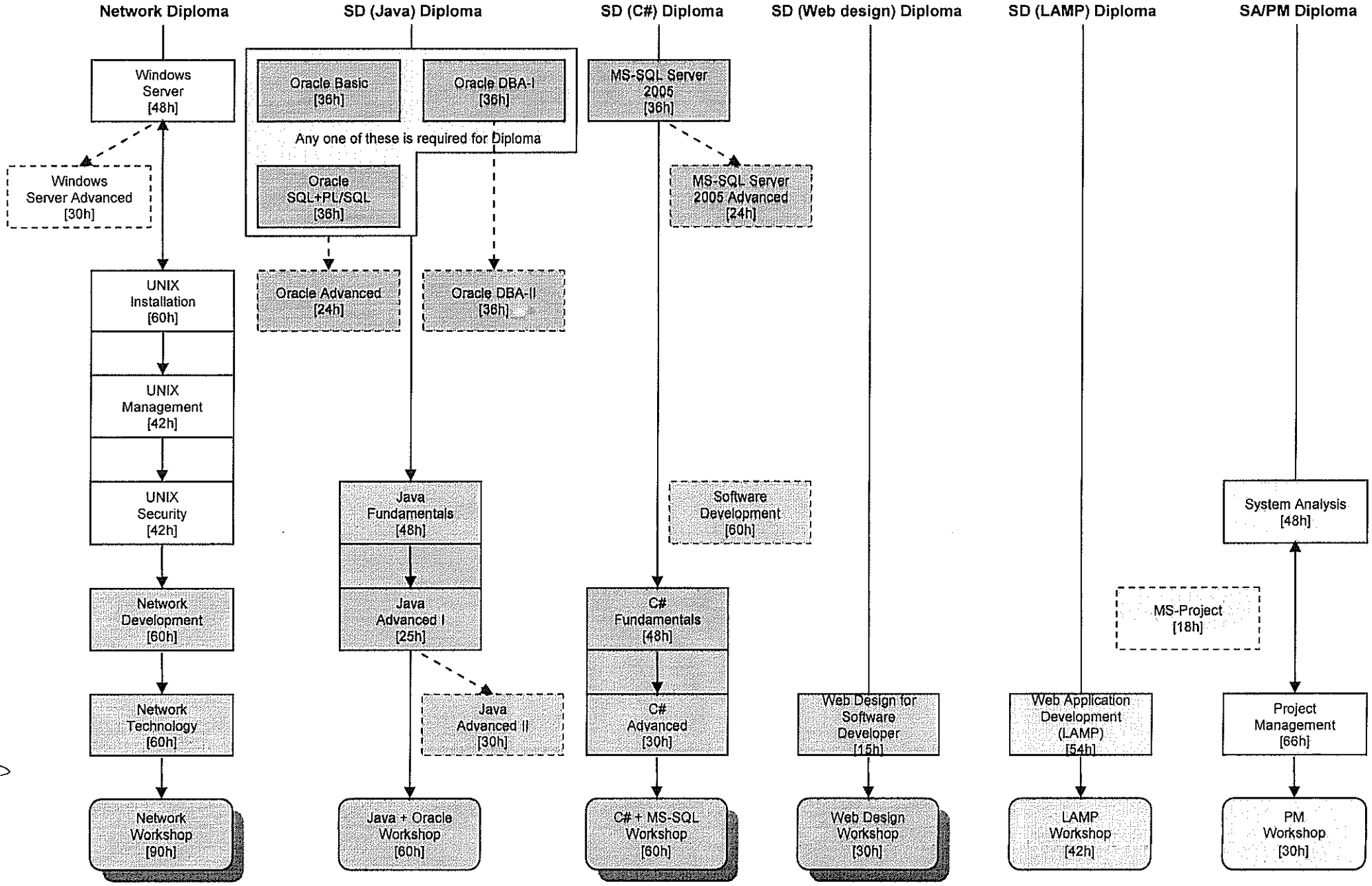
[8] Review of the curriculum will be done because the course will be introduced during the Phase 1.

PM (System analyst and PM training)				X	X	XX								
OS (Unix/Linux)				X	X	XX								
SD (SD / Java / C#)					X	XX XX								
LAMP														
Workshop (NW, SD x 2)														
OS (Windows)				X	XX	XXX								
5-4. To conduct various symposium when it is necessary				XX XX	XX	XX								
5-5. To conduct evaluation of training courses regularly	Result of evaluation sheet													Japanese experts, Kyrgyz C/Ps
5-6. To improve training courses regularly														Japanese experts, Kyrgyz C/Ps
5-7. To implement public relations activities														Kyrgyz side
5-8. To carry out administrative, financial and clerical work														Kyrgyz side
5-9 To conduct monitoring of the project														Japanese experts, Kyrgyz C/Ps

Annex 10

The Training Course Structure

17 Oct 07



Annex11. Summary List of Training Courses

Training courses within the scope of the project

No	Starting Date	Course Name	No. Participant		No. Successful Participants	Note
			Paid	Free		
1	14-Feb-05	Network	9		5	
2	14-Feb-05	Database	5		3	
3	04-Apr-05	Network	8		7	
4	04-Apr-05	Database	2		2	
5	10-May-05	Network	11		9	
6	10-May-05	Database	8		3	
7	20-Jun-05	Network	7		7	
8	20-Jun-05	Database	5		5	
1	17-Oct-05	Windows Server 2003 #1	10		6	
2	28-Nov-05	UNIX #1	9		7	
3	12-Dec-05	System Analysis #1	5		4	
4	11-Jan-06	Windows Server 2003 #2	4		2	
5	11-Jan-06	Database (Oracle) #1	2		2	
6	23-Jan-06	UNIX #2	4		4	
7	13-Feb-06	Project Management #1	9		9	
8	13-Feb-06	Database (MS-SQL Server) #1	2		2	
9	27-Feb-06	Windows Server 2003 #3	5		4	
10	06-Mar-06	Network Development #1	13		12	
11	13-Mar-06	SW Development #1	3		3	
12	13-Mar-06	Database (Oracle) #2	6		5	
13	03-Apr-06	UNIX #3	12		9	
14	03-Apr-06	C# Fundamentals #1	3		0	
15	03-Apr-06	Network Technology #1	6		3	
16	17-Apr-06	C# Advanced #1	3		0	
17	24-Apr-06	Windows Server 2003 #4	3		1	
18	10-May-06	Java Fundamentals #1	4	1	3	
19	10-May-06	Network Development #2	4		2	
20	10-May-06	Database (MS-SQL Server) #2	3	2	3	
21	14-May-06	System Analysis #2	3		3	
22	23-May-06	Java Advanced #1	3	1	2	
23	29-May-06	UNIX #4	3	2	4	
24	05-Jun-06	Windows Server 2003 #5	12		7	
25	05-Jun-06	Database (Oracle) #3	3		3	
26	12-Jun-06	SW Development #2	1	1	2	
27	05-Jun-06	Project Management #2	7	1	6	National Bank
28	10-Jul-06	Windows Server 2003 #6	11		4	
29	25-Sep-06	C# Fundamentals #2	3		3	ARIS
30	07-Oct-06	C# Advanced #2	3		2	ARIS
31	16-Oct-06	MS-Project #1	11		9	ARIS
32	16-Oct-06	Windows Server 2003 #7	11		7	
33	23-Oct-06	MS-Project #2	12		12	ARIS
34	23-Oct-06	Database (Oracle) #4	11		11	
35	30-Oct-06	MS-Project #3	13		13	ARIS
36	06-Nov-06	MS-Project #4	7		7	ARIS
37	06-Nov-06	UNIX #5	4		3	
38	13-Nov-06	Java Fundamentals #2	5		2	
39	15-Nov-06	System Analysis #3	4		2	
40	24-Nov-06	Java Advanced #2	5		2	
41	08-Dec-06	Windows Server 2003 #8	12		1	
42	11-Dec-06	LAMP #1	3		0	
43	11-Dec-06	Project Management #3	5		5	
44	18-Dec-06	Database (Oracle) #5	6		2	
45	08-Jan-07	Java Fundamentals #3	4		4	
46	08-Jan-07	Windows Server 2003 #9	7		6	
47	22-Jan-07	Java Advanced #3	3		3	
48	05-Feb-07	Windows Server 2003 (Fundamentals) #1	6		1	Tailor-made for NetCc
49	12-Feb-07	PM Workshop #1	6		6	3 got SA/PM diploma
50	19-Feb-07	Windows Server 2003 Advanced #1	4		4	
51	19-Feb-07	LAMP #2	8		4	
52	26-Feb-07	UNIX (Installation) #6	8	1	7	
53	05-Mar-07	LAMP W/S #1	3		0	
54	09-Mar-07	UNIX (Management) #6	8	1	7	
55	15-Mar-07	UNIX (Security) #6	8	1	4	
56	26-Mar-07	System Analysis #4	4		4	1 got SA/PM diploma
57	02-Apr-07	C# Fundamentals #3	8		3	
58	02-Apr-07	Database (Oracle) #6	11		11	
59	09-Apr-07	Windows Server 2003 #10	6		4	
60	12-Apr-07	C# Advanced #3	6		4	
61	26-Apr-07	MS-Project #5	11		11	Sky Mobile
62	02-May-07	Java Fundamentals #4	1		1	
63	18-May-07	Java Advanced #4	3		2	
64	28-May-07	Database (MS-SQL Server) #3	5		5	
65	04-Jun-07	LAMP #3	7	1	2	
66	25-Jun-07	Windows Server 2003 #11	4		3	
67	02-Jul-07	UNIX (Installation) #7	9		7	
68	10-Jul-07	UNIX (Management) #7	8		8	

69	19-Jul-07	UNIX (Security) #7	8		7	
70	23-Jul-07	C# Fundamentals #4	2		2	
71	03-Sep-07	TCTP Windows Server	0	12	5	
72	10-Sep-07	TCTP UNIX	0	12	5	
73	17-Sep-07	TCTP Network 1	0	12	3	
74	24-Sep-07	TCTP Network 2	0	12	6	3 got N/W diploma
75	24-Sep-07	C# Advanced #4	3		3	
76	01-Oct-07	UNIX (Installation) #8	13		2	
77	01-Oct-07	Java Fundamentals #5	6		2	
78	08-Oct-07	Project Management #4	7		5	
79	11-Oct-07	UNIX (Management) #8	12		9	
80	15-Oct-07	Java Advanced #5	5		3	
81	22-Oct-07	UNIX (Security) #8	12		10	
82	22-Oct-07	Database (Introduction to Oracle) #7	2	2	4	
83	29-Oct-07	Database (Oracle DBA1) #8	4		4	
84	05-Nov-07	Windows Server 2003 #12	4		2	
85	12-Nov-07	System Analysis #5	4		4	
86	26-Nov-07	Win Server/UNIX	9		4	Tailor-made for Gov.
87	01-Dec-07	Open Source	9		0	Tailor-made for Gov.
88	29-Nov-07	Database (MS-SQL Server) #4	5		5	
89	03-Dec-07	UNIX (Installation) #9	9		3	
90	10-Dec-07	C# Fundamentals #5	9		8	
91	10-Dec-07	Database (Introduction to Oracle) #9	8		8	
92	20-Dec-07	C# Advanced #5	6		2	
93	18-Dec-07	UNIX (Management) #9	10		8	
94	17-Dec-07	PM Workshop #2	2		2	2 got SA/PM diploma
95	09-Jan-08	UNIX (Security) #9	10		8	
96	21-Jan-08	Windows Server 2003 #13	8		7	
97	11-Feb-08	C# Fundamentals #6	3	2	2	
98	11-Feb-08	Database (Oracle DBA1) #10	7			
		Total	**648**	**64**	**478**	**9 got diploma**
		Rate of Filled Vacancy	**50.9%**			
		Rate of Successful Participants			**67.1%**	

Training courses outside the scope of the project

No	Starting Date	Course Name	No/ Participant		No/ Successful Participants	Note
			Paid	Free *1		
1	24-Apr-06	Basic IT	7	4	9	
2	10-May-06	Basic IT	9	3	7	
3	05-Jun-06	Basic IT	17		12	
4	19-Jun-06	Basic IT Advanced	12		8	
5	03-Jul-06	Basic IT	8	2	7	
6	31-Jul-06	Basic IT	16		14	OSCE
7	14-Aug-06	Basic IT Advanced	3	1	4	
8	14-Aug-06	Basic IT	17		9	OSCE
9	28-Aug-06	Basic IT	16		12	OSCE
10	04-Sep-06	Basic IT	17		9	OSCE
11	18-Sep-06	Basic IT Advanced	15		4	Bitel
12	25-Sep-06	Basic IT	15		10	OSCE
13	25-Sep-06	CCNA-1	13		6	
14	09-Oct-06	Basic IT Advanced	10		7	OSCE
15	09-Oct-06	Basic IT	7	3	7	
16	06-Nov-06	Basic IT Advanced	8	2	6	
17	06-Nov-06	CCNA-2	6		5	
18	09-Nov-06	CCNA-1	10		8	
19	20-Nov-06	Basic IT in Kyrgyz	8		7	
20	27-Nov-06	Basic IT	11		10	
21	08-Jan-07	CCNA-2	6		3	
22	15-Jan-07	CCNA-1	5		2	
23	15-Jan-07	Basic IT Advanced	9		8	
24	22-Jan-07	Basic IT	11		8	
25	22-Jan-07	Basic IT Advanced	8		5	
26	22-Jan-07	CCNA-3	5		4	
27	26-Feb-07	Basic IT	12	1	11	
28	05-Mar-07	Basic IT Advanced	12		6	
29	05-Mar-07	CCNA-1	9		6	
30	09-Mar-07	CCNA-2	5		2	
31	06-Mar-07	CCNA-4	2		2	
32	12-Mar-07	CCNA-2	5		3	
33	24-Mar-07	CCNA-1	2		1	
34	26-Mar-07	Basic IT	14	1	12	
35	26-Mar-07	CCNA-3	2		2	
36	31-Mar-07	CCNA-2	1		1	
37	14-Apr-07	CCNA-1	1		1	
38	23-Apr-07	CCNA-2	4			
39	23-Apr-07	Basic IT	12	1	10	
40	23-Apr-07	Basic IT Advanced	8	1	5	
41	28-Apr-07	CCNA-3	2		2	
42	28-Apr-07	CCNA-2	1		1	
43	01-May-07	Cisco IT Essentials	19		16	Sebat College
44	12-May-07	CCNA-2	1		1	
45	30-May-07	CCNA-1	1		1	
46	09-Jun-07	CCNA-4	1		1	
47	14-Jun-07	CCNA-1	2		0	
48	15-Jun-07	CCNA-4	1		1	
49	23-Jun-07	CCNA-3	1		1	
50	23-Jun-07	CCNA-1	1		1	
51	29-Jun-07	CCNA-1	1		0	
52	30-Jun-07	CCNA-2	1		1	
53	02-Jul-07	Basic IT	12		9	
54	10-Jul-07	Basic IT Advanced	7		4	
55	16-Jul-07	Cisco IT Essentials	2		2	
56	23-Jul-07	Basic IT	9		7	
57	20-Aug-07	Basic IT	8	1	5	
58	19-Sep-07	Basic IT	4		3	
59	01-Oct-07	CCNA-1	8		3	
60	15-Oct-07	CCNA-2	9		3	
61	29-Oct-07	Basic IT	6		5	
62	29-Oct-07	CCNA-3	4		4	
63	05-Nov-07	Basic IT	5		5	
64	12-Nov-07	CCNA-4	4		1	
65	19-Nov-07	Basic IT Advanced Special	18		18	URBAN Institute
66	14-Jan-08	CCNA-1	8		7	
67	21-Jan-08	Basic IT	9		7	
68	26-Jan-08	CCNA-2	4		4	
69	11-Feb-08	CCNA-3	2		2	
		Total	**509**	**20**	**368**	
		Rate of Filled Vacancy		**63.9%**		
		Rate of Successful Participants			**69.6%**	

*1 for the physically challenged etc.

Annex12. List of Seminars

Date	Title	Lecturer	Content	No. Participants
2005/9/22,23	Presentation Techniques (Closed)	Mr. Iwamoto	Presentation Fundamentals Cognitive Process of Learning Analysis & Design Interface Design Speaking Skill, Attitude, and Rehearsing	15
2005/10/21	Why Database? (Open)	Mr. Ishikawa	Why Database? Why not Excel? Using Database in small/middle/enterprise businesses Database products and trends It's free!? -- Database in OSS world	52
2005/10/21	Company development by strategic IT construction (Open)	Mr. Hayashi	The paradigm shift caused by E-business Present condition and prospects at BtoC and BtoB Impact given to industry and change to market Conversion into buyer predominance from seller predominance	52
2005/11/14	Introduction to Project Management (Open)	Mr. Kogure	What is a project? What is project management? Overview of project management Who is project manager?	21
2005/11/14	Enterprise Computing With Linux (Open)	Mr. Nakayama	Linux Trend OSS GPL Linux Technology Enterprise version of Linux Cost Keys for Linux as an Enterprise Computing OS	21
2006/1/18	Network Security Awareness (Open)	Mr. Sasahara	Security issue of Wireless Network Security issue of Wired Network How to protect	54
2006/1/18	What is Web Application? (Open)	Ms. Shiraishi	Let's see some Web sites! What is Web Application? Demonstration New technologies	54
2006/1/19	Banking business with IT (Open)	Mr. Takeuchi	Banking Business and IT Japanese Banks under IT Revolution How should the bank cope with the new situations facing them? Topics Conclusion	24
2006/1/20	Telecommunications Management (Open)	Mr. Ejiri	Target of The Management Architecture of The Management OSS(Operations Support System) Development NGN (Next Generation Networks) Management Competitive SLA (Service Level Agreement)	24
2006/6/27,28	eLearning-oriented Instructional Design (Closed)	Mr. Iwamoto	ID and eLearning Needs assessment Front-end analysis Design Evaluation What is eLearning Learning Management System (LMS) Contents development Adopting eLearning to NITC	10
2006/6/30	Ruby (Open, JICAnet)	Mr.	What is a good language? What is Ruby? Why and how I created Ruby?	20
2006/7/7	Security (Open, JICAnet)	Prof. Takefuji	New trend in security New trend in ICT	17
2006/9/8	Data Warehouse and Business Intelligence (Open)	Mr. Ishikawa	Data warehouse Business intelligence OLAP Data mining CRM SCM Enterprise grid computing Real application clusters	18
2006/9/8	Importance of Project Management (Open)	Ms. Eguma	Current status of project management Why project fails? Organizational Project Management Maturity Model (OPM3) Project Manager Competency Development Framework Risk-based project management	25
2006/9/15	Science and Art - Digital graphics editing (Open)	Mr. Kogure	How digital editing differs from analog editing Understanding the science of digital color and light (color theory, bit depth, etc.) Digital editing by science (level adjustment, white balance, rounding error handling, etc.) Non-destructive editing (techniques on using masking & alpha channel, etc.) Compression and Bandwidth issue	25

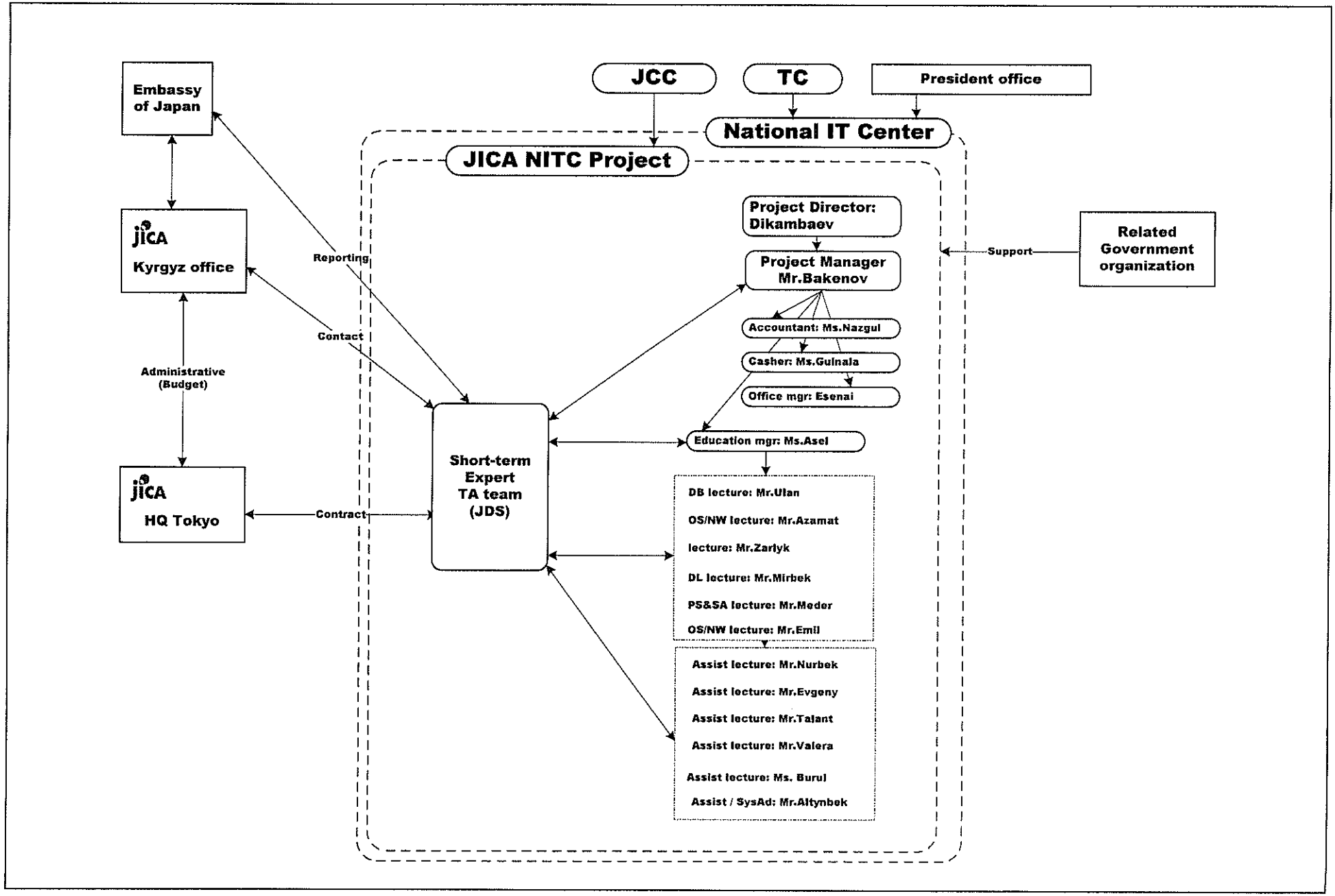
Date	Title	Lecturer	Content	No. Participants
2006/9/22	Network Security Awareness (Open)	Mr. Sasahara	Security issue of wireless network About wireless network Wireless security situation at Bishkek Security issue of wired network Typical network structure using CISCO, SonicWALL and Security issue of wired network How to improve network security IDS (Intrusion Detection System) on Linux Administrator's practice	21
2007/6/11	Better management, to ensure self-sustainability (Closed)	Mr. Utaka	Vision Mission PDCA Cycle SWOT Analysis PEST Analysis Recommended Approach	9
2007/6/11	Marketing Planning (Closed)	Prof. Imai	Objectives of Marketing Processes for Realizing the Final Objectives To understand customers Determination of Organizational Activities To consider Products To consider Price To consider Promotion To consider Place To consider Marketing Mix (Total Marketing Strategy)	9
2007/9/7	Web2.0 and beyond (Open)	Mr Kogure	Definition of Web 2.0 Blog, SNS and media sharing Feeds and Aggregation Web services, SOA and SaaS Semantic Web Other latest trends for the Web	37
2007/9/21	Industry-academia-government collaboration (Open, JICAnet)	Prof. Homma	Overview of Linkage between University, Industry and Number of Joint Research Contracts between University and Industry in Japan Toyohashi University of Technology Industry Cluster Summary	21
2007/11/5	The System Development - How does it go? (Closed)	Mr. Ishikawa	The development process steps What's contained in the Proposal? What's contained in the Specification? Examples Keys to Success	11
2007/11/23	The New Network to the Remote Area (Open)	Mr. Sasahara	$100PC & Mesh Network PFnet at Solomon Island Village Area Network	19
2008/2/29	The Summary of Project 2007 (Closed)	Mr. Iwamoto	Summary of Training Courses Quality of Courses Recommendations	8
			Total	567

Annex 13. 3rd country training: Title of the Course: "Network Administrator in Government Department"

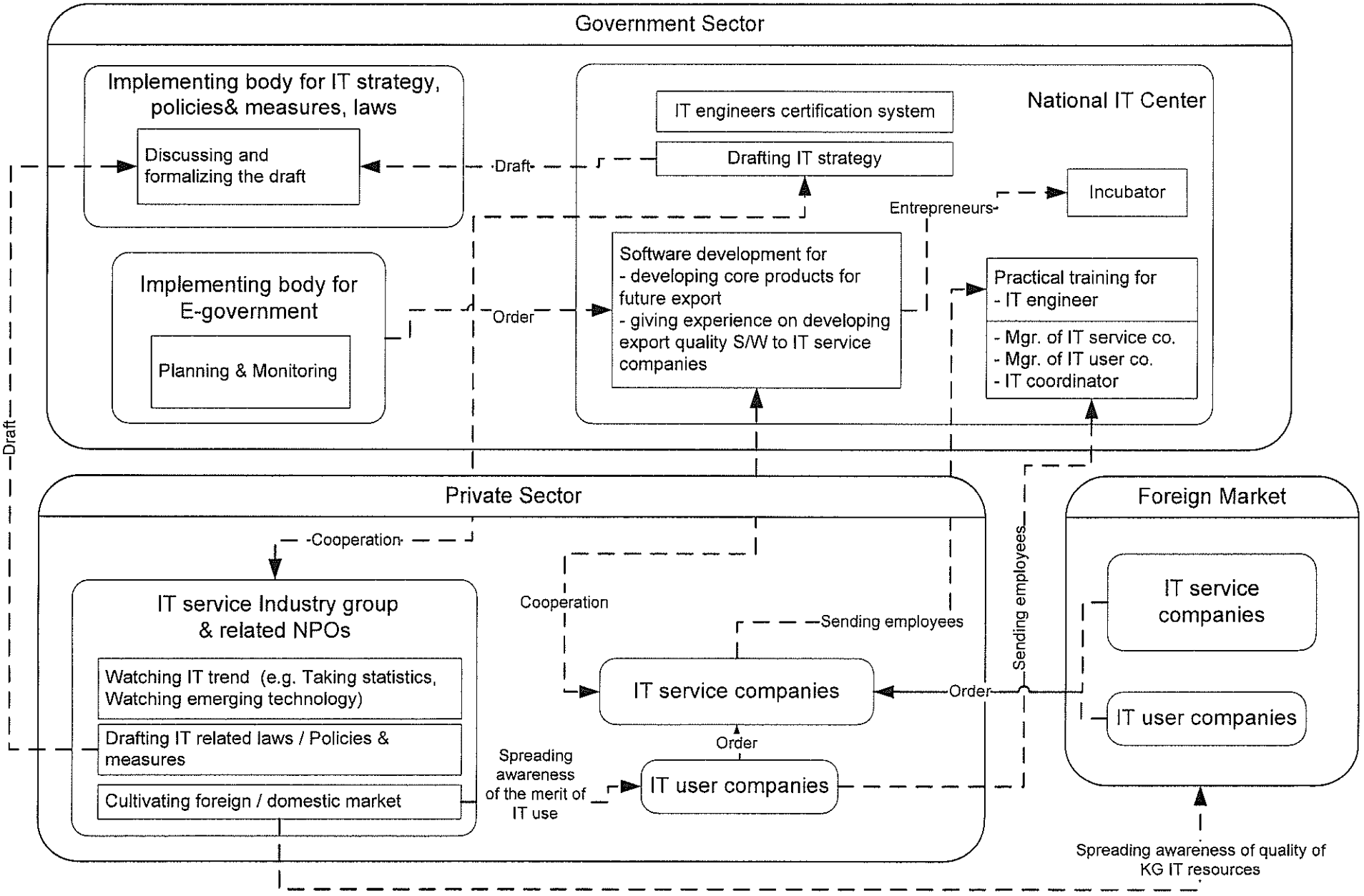
The participant list and final test results of Third Country Training Program September 1-30, 2007, Bishkek, Kyrgyz Republic

ID	Name	Country	Company / position	OS Windows Server	OS UNIX/Linux	Network development	WLAN	
1	Umaraliev Rajab Shamsovich	The Republic of Tajikistan	Tajik Technical University, Faculty of IT and communication technologies / Assistant	25	31	22,5	25	
2	Murodov Nakim Kayumovich	The Republic of Tajikistan	The Executive Presidential Office of the Republic of Tajikistan / Leading Specialist of the Press-service of the Presidential	14	31	15,5	25	
3	Akhmedova Anastasya Alvevna	The Republic of Tajikistan	The Ministry of Foreign Affairs of the Republic of Tajikistan, Information department / Specialist	26	55	22,5	25	
4	Safiev Kadamjon Ismatovich	The Republic of Tajikistan	Ministry of Communications and transport of the Republic of Tajikistan, IT and informatization department / Executive specialist	24	40	12,5	-	
5	Kadykenov Malik Bolatovich	The Republic of Kazakhstan	Kazakh Economic University named by T. Ryskulov / Chief of "Center of information technology" department	82	85	81	100	Diploma
6	Galin Viktor Alexandrovich	The Republic of Kazakhstan	Information and Testing Center of the Agency of the Republic of Kazakhstan on civil servant affairs, Public Office / System administrator	72	95	48,5	100	
7	Kompaniyets Sergey	The Republic of Kazakhstan	Information and Testing Center of the Agency of the Republic of Kazakhstan on civil servant affairs, Public Office / System administrator, System analyst	88	95	59,5	100	
8	Musaev Tokhir Munirovich	The Republic of Uzbekistan	Tashkent Automobile and Road Construction Institute / System administrator	91	100	90	100	Diploma
9	Sultanov Sadulla Sunnatillaevich	The Republic of Uzbekistan	Scientific Engineering and Marketing Research Center / Head of department	15	60	7,5	40	
10	Rustamov Khusan Botirovich	The Republic of Uzbekistan	Scientific Engineering and Marketing Research center / Senior engineer	31	63	9	100	
11	Khusandiarov Zufar Dilmuratovich	The Republic of Uzbekistan	Scientific Engineering and Marketing Research center / Engineer	50	65	40	55	
12	Kolupaev Oleg Anatolevich	The Republic of Uzbekistan	Scientific Engineering and Marketing Research center / Senior engineer	92	100	87,5	100	Diploma

Annex14: Organization Chart of NITC



Annex 15: Conceptual diagram of Kyrgyz IT service industry



Annex 16. Member of JCC

Japan:
JICA Kyrgyz Republic Office
Embassy of Japan (observer)

Kyrgyz Republic:
Presidential Administration (Head of Department of Social and Economic Policy)(Chairman)
Ministry of Finance (Head of Foreign Investment Department)
Ministry of Transportation and Communication (Head of ITC Department)
Ministry of Education and Science (Head of ITC Department)
ICT Council (Executive Secretary)

Annex 17 Evaluation Grid

1. Achievement

Items to be checked		Indicators (Criteria /Method for assessment)	Necessary data and information	means of verification	Results of the evaluation
Main points	Specific questions				
Degree of achievement on Input		Whether there is a gap between actual and plan	Actual input	Project report by the Japanese consultant team Interview with C/Ps	The planned Japanese team leader was not dispatched because JICA could not find a suitable candidate. Instead, project was outsourced to the consulting firm, Japan Development Service Co., Ltd. The Phase II of the project was planned to start from April 2005, but it was delayed due to the impact of the revolution in Kyrgyz.. Most of the machinery and equipment pieces were delivered according to schedule. The first Project Director was replaced after the revolution and the position was vacant for a while.
			Was there any negative effect due to delay of inputs?	Project report by the Japanese consultant team Interview with C/Ps	The delay in selection of the consulting firm and its dispatch negatively affected the schedule for technology transfer and implementation of training courses. However, the delay in activities was kept to a minimum due to efforts of the Japanese experts.
			Has the project introduced any countermeasures?	Project report by the Japanese consultant team Interview with C/Ps	No
Degree of achievement on Outputs	C/Ps ' skill is improved.	All instructors can attain a certain high level as confirmed by the Japanese side.	Assessment by the Japanese experts	Project report by the Japanese consultant team	The Japanese experts assessed that all the counter personnel's (C/Ps) have gained necessary skills and knowledge as a lecturer.
		80% of trainees are satisfied with instructors	Assessment by the trainees	Project report by the Japanese consultant team	Results of the evaluation by the trainees completed at the end of the training courses revealed that more than 90% of the trainees were very satisfied with the lectures' teaching method and knowledge.
	Training course curriculum is properly formulated and updated every year.	All training course curricula are formulated within a year after the Phase 2 starts and updated every year.	Record of the Center's activities	Project report by the Japanese consultant team	A curriculum was formulated within a year after the Phase II started and revised in March and August 2005, February, May and September 2006 and May 2007.
		C/Ps can revise curricula by themselves.	Assessment by the trainees	Project report by the Japanese consultant team	In September 2007, the Japanese experts found that not all the C/Ps had gained enough capacity to develop and modify curricula on their own. However, at the final evaluation in February 2008, the Japanese expert stressed that all the C/Ps has gained enough capacity. In the questionnaire completed at the final evaluation, all the C/Ps showed self-confidence in designing a curriculum.
	Facilities and equipment necessary for training are properly prepared.	The register book is revised on a periodical basis.	Record of the Center's activities	Project report by the Japanese consultant team	Japanese experts concluded in Sep 2007 that the register of equipment and the record of maintenance are well maintained.
			Condition of facilities and equipment		The evaluation team checked condition of facilities and equipment.
	Training materials and manuals are properly prepared.	80% of trainees is satisfied with training materials.	Assessment by the trainees	Project report by the Japanese consultant team	The evaluation by the trainees at the end of the training courses showed that 96.3% of the trainees were very satisfied with the training materials.
		C/Ps can update training materials and manuals by themselves.	Assessment by the Japanese experts	Project report by the Japanese consultant team	In September 2007, the Japanese experts concluded that not all the C/Ps had gained enough capacity to develop and modify training materials by themselves. However, at the final evaluation in February 2008, the Japanese expert stressed that all the C/Ps gained enough capacity. In the questionnaire at the final evaluation, all the C/Ps showed self-confidence in updating training materials.
	Training courses are implemented with an appropriate quality.	Rate of successfully completed participants for training courses becomes to more than 70% in average during the Project period.	Record of the Center's activities	Project report by the Japanese consultant team	During the Phase II of the Project, there were 705 trainees in total and 67.8% of them completed the courses, which is just below the target.
		More than 80% of trainees are satisfied with the training courses.	Record of the Center's activities	Project report by the Japanese consultant team	The evaluation by the trainees at the end of the training courses revealed that most of the trainees were very satisfied with the training courses. According to the questionnaire survey in February 2008, all the former trainees who responded were still satisfied with their courses.

Degree of achievement on Outputs	Third-Country Training Programs are implemented with an appropriate quality.		Record of the Center's activities	Project report by the Japanese consultant team	The training for 12 trainees from Kazakhstan, Uzbekistan and Tajikistan was conducted in September 2007. 41.7% of the trainees passed the Windows Server course and the Linux Course. 25% passed the Network Development course, 50% passed the Network Technology course. Six trainees failed to pass any course at all, and no Tajik trainee passed any courses. Despite the low success rate, the evaluation by the trainees at the end of the training courses showed their high satisfaction.
Degree of achievement on the Project Purpose	The Center functions properly as the training institute of high-level IT engineers at the end of the Phase Two period.	More than 420 are graduated from NITC courses (400 for short-term courses and 20 for Diploma courses) during the Project period.	Record of the Center's activities	Project report by the Japanese consultant team	478 trainees in total graduated their courses, which already meets the target figure of 400 defined on PDM. However, only nine of them so far have received a diploma, which is awarded to those who complete a set of mandatory courses in a particular field of IT. The fulfilment ratio to the capacity of 12 participants in each course was just 50.9% on average.
		More than 75% of employers who send trainees are satisfied with increased ability of graduates from the Center.	Opinion of employers who send trainees	Results of questionnaire	All the managers who sent their staff members to the Center for the course thought that it was correct to do so. This is more than the target figure of 80%.
		More than 80% of trainees are satisfied with the training courses.	Opinion of trainees	Results of questionnaire	At the end of their courses, the trainees also gave a high score to the question "How do you evaluate the general level of the training organization?". According to the questionnaire survey on the former trainees in February 2008, all the former trainees are still satisfied with the Center.
		The Center becomes self-sustainable in financial term.	Center's income and expenditure	Financial accounts of 2007	The Center' s income from its activities has increased from 342,000 som in 2005 to 2,088,000 in 2007 . The figure of 2007 is close to the figure of 2,217,600 som predicted in the R/D. However, it is not enough to cover the cost of operation. The Center becomes sustainable only with the subsidy from the Kyrgyz government.
Degree of achievement on the Overall Goal	High-level IT engineers are sufficiently provided to IT market in the Kyrgyz Republic.	The number of graduates from NITC constantly increase compare to the previous year.	Annual number of graduates	Project report by the Japanese consultant team	The number of Center graduates has increased constantly: 114 graduated the course between October 2005 and September 2006, and 217 from those between October 2006 and September 2007. The number of graduates has increased smoothly since October 2007 as well.

2.Process

Progress of activities	Whether the activities were taken as planned	Gap between plan and actual	Activities which were not taken as planned	Project report by the Japanese consultant team	The delay in selection of the consulting firm and its dispatch negatively affected the schedule for technology transfer and implementation of training courses.
			Any negative effect?	Project report by the Japanese consultant team Interview with C/Ps	The delay in activities was kept to a minimum due to efforts of the Japanese experts.
			Is there any countermeasure?	Project report by the Japanese consultant team Interview with C/Ps	N/A
Progress of monitoring activities	Whether the monitoring system of the project is appropriate and effective	Whether the monitoring system was established	Progress of monitoring activities	Project report by the Japanese consultant team Interview with C/Ps	Monthly reports are submitted by the Project Manager in English and by the Japanese experts in Japanese. The Project Manager attends a monthly meeting with the JICA Kyrgyz Office.
			JCC activities	Project report by the Japanese consultant team	The JCC was held four times: in March 2005, February and October 2006, and March 2007. In the JCC, progress of project activities was presented and issues were shared among the participants. However, the JCC was reportedly not functioning as expected. It was heard that the JCC was held just because it had to be as a ceremony, not because there was something important to discuss.
		Whether the monitoring system was utilized to revise PDM or PO	Number of PDM and PO revision		PDM has been revised several times as some original indicators were not appropriate and new activities such as the third country training was introduced.

Relationship between Japanese experts and Kyrgyz counter personnel	Whether the communications between them was established well and intensive	Whether internal meeting is held regularly	Status of the internal meeting		Weekly meeting is held every Monday morning.. However, according to the Project Manager, the attendance rate is not high.
	Whether technical transfer has been done appropriately	Progress on the technical transfer activity	Have the Japanese experts conducted technical transfer activities as the C/Ps expect?	Project report by the Japanese consultant team Interview with the C/Ps	The delay in the dispatch of the Japanese experts from the consulting firm had led to the delay in technology transfer activities. On the other hand, the Kyrgyz side decided to start the training courses as planned to secure income. Therefore, some C/Ps did not have enough time to receive technology transfer. However, due to the efforts of both sides, the C/Ps gained enough skills and knowledge through lectures from the Japanese experts. According to the questionnaire survey in February 2008, all the lectures and the assistant lecturers of the Center thought that the technology transfer activities were adequate in terms of the Japanese experts' expertise, number of the experts, duration and timing.
			Whether the C/Ps have secured enough time for technical transfer	Project report by the Japanese consultant team	
			Whether capacity of the CPs is high enough to receive technical transfer.	Interview with the Japanese experts	According to the Japanese expert, the lectures and assistant lectures have enough capacity.
Whether C/Ps have enough ownership to implement the project	Whether the Project has implemented by the C/P initiative	Behaviour of the C/Ps	Whether C/Ps are self-motivated toward the project activities Whether C/Ps understand the significance of project	Interview with the Japanese experts	The lecturers and the assistant lectures are highly motivated to learn new technology. They mentioned in the interviews at the final evaluation that their major reason to work for the Center was to access new technology. They are also willing to introduce new courses beyond the project's scope such as a CISCO Academy course. Their ownership of the Center's management should be improved.
Implementation system	Did JICA provide enough support?	Whether JICA provide assistance quickly enough	Quantity and quality of JICA's support	Interview with the Japanese experts and C/Ps	Since the departure of the Japanese coordinator, JICA Kyrgyz Office has been in charge of all bidding.. The Project Manager has a monthly meeting with JICA office.
	Whether outsourcing approach is appropriate	Whether the approach is efficient	Opinion of C/Ps, JICA experts,	Interview with JICA HQ and Kyrgyz office	The Japanese experts from the consulting firm reportedly implemented the activities efficiently to achieve the targets. The Japanese experts submitted a progress report on a regular basis, and communication among the experts, C/Ps and the JICA was well facilitated.
	Whether internal control at the Center is functional	Whether activities and disbursement are carried out according to the regulation	Whether necessary regulation has been introduced	Interview with C/Ps	There are not so many regulations as this is a small organization.
			Whether staff follows the regulation	Interview with the Japanese experts and C/Ps	External audit was carried out in 2006 and the Center received good mark. Internal control is effective at the Center.

3.Evaluation －Relevance

Items to be checked		Indicators	Necessary information and data	Means of verification	Results of evaluation
Main points	Specific questions				
Necessity, Priority	Whether the objective of the Project is aligned to the Kyrgyz government policy	Whether there is any policy change in the field of IT.	Present ICT policy and strategy	Checking the Internet Interview with the President office	The "National Strategy: Information and Communication Technologies for Development in the Kyrgyz Republic" of 2002 has not been replaced even after the revolution. One of the three major priorities of the strategy is "Education-human capacity building and training of staff in ICT". The "Country Development Strategy 2007-2010" stressed the importance of IT usage.
			Recent activities of the ICT council	Interview with C/Ps and the President Office	Although the Council was re-formed after the revoluation, functions and roles of the Council have not been changed.
	Whether choice of the target group was appropriate.	Relevence of the target group	History of the change of the target group	Project report by the Japanese consultant team	At the mid-term evaluation, the target group was changed from "Graduates from universities and engineers" to "Potential and currently working IT engineers".
		Whether the project meet the necessity of the target group	Number of trainees from IT companies Evaluation by IT engineers	Project report by the Japanese consultant team Interview with C/Ps Questionnaire for the former trainees	Interviews with graduates of the training courses and IT companies at the final evaluation revealed that the project was highly relevant to their needs and the Center was recognized as the only high-level IT training institute in the country. Records of the Center showed that patterns of attendance in its training changed. Attendance of IT engineers from IT companies significantly increased in 2007. It shows that the Center is becoming well recognized as an IT training institution among IT companies.
	Whether the project is aligned to Japanese aid policies	Alignment to the Japan's Country Assistance Strategy	Whether the Japanese government stresses on importance of its assistance in the field of IT	Country assistance strategy	According to Japan's Country Assistance Strategy for the Kyrgyz Republic, one of the main assistance fields is human resource development towards market-oriented economic reform. The strategy regarded the Center as the hub for IT human resource development for the country and the region.
		Alignment to the JICA's assistance plan	Whether JICA stresses on importance of its assistance in the field of IT	JICA's assistance plan	JICA's Country Assistance Plan also stresses the importance of human resource development towards market-oriented economic reform. The plan expects the Center to produce IT engineers who can contribute to private sector development. The Project is thus relevant to the Japan' s aid policy.

Appropriateness of its approach	Comparative advantage of Japanese technology	Whether Japan has advantage in this field	Japan's know how in the field	Interview with the Japanese experts and the C/Ps	JICA has a comparative advantage in IT human resource development, as it has conducted similar projects in many countries.
			Securement of necessary human resources	Interview with JICA	An issue is how to secure appropriate persons to dispatch in such undertaking. JICA managed to secure human resources this time in Japan by outsourcing the Project' s activities to the Japanese consulting firm.

3. Evaluation —Effectiveness

Items to be checked		Indicator	Necessary information/data	Means of verification	Results of Evaluation
Main points	Specific questions				
Degree of achievement on the project objective	Whether the project object will be realized		See the column above		Project Purpose will be achieved if the Kyrgyz government provides a subsidy as planned.
Contribution of the outputs to the project objective	Whether there was any hampering factors against the project objective	Hampering factors against the project objective		Interview with C/Ps and the Japanese experts	There are factors inhibiting the achievement of the Project Purpose as follows; Mid-term management and financial plan has not been formulated, PR activities on the training courses have not been sufficient due to lack of financial and human resources. The number of trainees can be increased by introducing aggressive promotion activities. Communication between the Project Director and the Center staff has not been encouraged as expected.
	Whether the effects (project purpose) are generated by the achievement of project outputs	Important assumption between the outputs and the objective	Recognition of the Center's certificates	Interview with the trainees and their employer	It was heard during the interview with IT companies at the evaluation that they respect the Center's certificate. However, some of them revealed that they respect international companies' certificate more,.

3.Evaluation —Efficiency

Items to be checked		Indicator	Necessary information/data	Means of verification	Results of Evaluation
Main points	Specific questions				
Degree of achievement on output		Whether the outputs will be realized	See the column above		See the above column
Adequacy of the input	Whether dispatch of the experts was appropriate	Whether there is gap between plan and actual	The dispatch has been carried out according to the plan	Project report by the Japanese consultant team	In the Phase II, Two long term experts were planned to be dispatched; Team Leader and Coordinator. However, the Team Leader was not dispatched because JICA HQ could not find an appropriate person. Then, JICA decided to outsource the project to a consulting firm. Selection of the consultant team was delayed due to the complexity of JICA's internal procedures. After departure of the Coordinator in Nov 2006, no long-term expert has not been dispatched.
			Whether there was any negative impact on project management	Questionnaire to C/Ps Interview with the Japanese experts and C/Ps	Delay of selection of a consulting team and dispatch hampered the schedule of technology transfer and implementation of training courses. Absence of the Coordinator after Oct 2006 has not caused a significant negative impact. The Office Manager and the JICA Kyrgyz Office took over the activities.
			Whether the experts' skill and knowledge were good enough.	Questionnaire to C/Ps Interview with C/Ps	According to the questionnaire survey in February 2008, all the lectures and the assistant lecturers of the Center thought that the technology transfer activities were adequate in terms of the Japanese experts' expertise, number of the experts, duration and timing.
	Whether provision of machinery and equipment was adequate in terms of their specification and timing of provision.	Whether there is gap between plan and actual	Provision of machinery and equipment was carried out according to the plan.	Project report by the Japanese consultant team Project report by the Coordinator	Most of them were delivered according to the schedule. Some items were delivered behind the schedule, but the technical transfer activities and the course operation were not disturbed. Machinery and equipment were not purchased at the cheapest price. The reason was that some corporate bidders who could have offered the cheapest price because they were requested to submit the guarantee service certificates by the JICA's regulation.
			Whether there was any negative impact on project management	Interview with C/Ps	Technical transfer activities and the course operation were not disturbed by the delay of the delivery.
			Whether the machinery and equipment have been utilized.	Project report by the Coordinator Observation	Some items are not utilized such as Duplo DB-430, Duplo PB-200.
			Whether the machinery and equi pment are managed by appropriate way.	Interview with C/Ps	They are well managed.

Adequacy of the input	Whether training in Japan was appropriate in terms of number of trainees, timing, contents.	Whether there is gap between plan and actual	Whether training was carried out according to the plan	Project report by the Japanese consulting team	10 in total have received training in Japan.
			Whether the training was appropriate.	Questionnaire to C/Ps Interview with the Japanese experts and C/Ps	All the participants in the training in Japan thought that the training was useful and positively affected their attitude. Training in 2006 could have focused more on practical aspects.
			Whether C/Ps make good use of new knowledge and skill after their training	Questionnaire to C/Ps Interview with C/Ps	Result of the questionnaire at the evaluation shows that all of them consider the training was useful.
	Whether allocation of the counter personnel are adequate in terms of number and their qualification	Whether there is gap between plan and actual	Whether C/Ps were allocated as planned.	Project report by the Japanese consulting team	The Project Director was replaced twice and the position had been vacant for a while. Two managers and two lecturers quit during the project period. Otherwise C/Ps and other staff were adequately assigned. If a staff member dedicated to PR activities were recruited, the Center would have gathered more trainees.
			Was there any negative effect? If yes, any countermeasures have introduced	Project report by the Japanese consulting team Interview with C/Ps	The Project Manager has taken full responsibility for management.
			Whether C/Ps capacity is high enough	Interview with the Japanese experts	Japanese experts judged that C/Ps have very high potential as an IT engineer and they have very high skills even compared to other IT engineers in JICA IT human resource projects.
			Risk of C/Ps' turnover	Interview with the Japanese experts	Some staff members seem to have been demoralized due to a few reasons including the low level of their salary compared to IT engineers of the private sector. Their motivation would decrease further after the end of the Project, as they have no chance to receive technology transfer from the Japanese experts. Some of them may even leave the Center from now on.
	Whether buildings and facilities are adequate		Whether working space provided by the Kyrgyz side is enough.	Interview with the Japanese experts	Expansion work was finished in Jan 2006. Building and facility are judged as appropriate. Results of the evaluation at the end of each course reveals that participants were satisfied with the building and facility.
			Whether a room for the Japanese experts is big enough	Interview with the Japanese experts	Japanese experts are provided a comfortable room.
	Financial input from the Kyrgyz side		Whether cash has been allocated according to the plan	Financial report	According to R/D, the Kyrgyz Government is committed to provide at least 5 million som annually during the project period. However, actual allocation was less than 5 million, as the Center has requested less.
			Future prospect	Financial report	The Presidential Decree issued in Jan 2008 promises to provide subsidy 3 million sum annually till 2011.

3.Evaluation —Impact

Items to be checked		Indicator	Necessary information/data	Means of verification	Results of Evaluation
Main points	Specific questions				
Probability of achievement on the Overall Goal	High level IT engineers are sufficiently provided to IT market in the Kyrgyz Republic	The number of graduate from the center	See the above column		Number of graduates has increased constantly, 114 from Oct 2005 to Sep 2006 and 318 from Oct 2006 to Sep 2007. Number of graduates has increased since oct 2007 compared to the same period of the previous year.
	Contribution of the project to achieve the overall goal	Important assumption between the project objective and the overall goal	Economic trend in Kyrgyz	Progress of GDP	Although economic has not been stable especially 2005 after the revolution, demand for IT has been increased.
			Whether IT policy has changed		See the above
			Brain drain of the former trainees	Interview	It was not measured, but there is always risk for brain drain. According to the interview with the lecturer of IT department in Kyrgyz Technical University, 30% of the graduates emigrates to Kazafstan.
Other impact	Economic aspect	Whether trainees have improved their performance after the courses			Results of questionnaire to company managers who assigned their staff to the Center courses shows that some former trainees have already their productivity and quality of work after their training.
	Social aspect	Percentage of female trainees	Percentage of female trainee	?	Number of female trainee is 137, 19.2% of total. The Center has introduced some basic IT courses and nearly half of trainees are female. The Project will have a positive impact on gender aspects.
	Others				Some other donors projects have assigned their staff to the training courses. For instance, One NGO's project aims to minimize the digital divide with assistance from USAID and EBRD have sent their 18 trainees to the Center. The Center would be able to contribute to other donors' project success. It was considered at the time of R/D to introduce an IT standard such as ITSS by the Project. No action has taken so far, but the Project Manager is considering to move forward.

3.Evaluation —Sustainability

Items to be checked		Indicator	Necessary information/data	Means of verification	Results of Evaluation
Main points	Specific questions				
Political aspect	Whether IT industry will grow and demand of human resource will increase	Growth rate of IT industry	?	Economic statistics	Demand for IT usage has increased. According to the Statistics Office data, number of companies and organizations using IT has increased between 2002 and 2006. In Bishkek, 836 companies and organizations were using IT in 2002 and the number has increased to 1693 in 2006.
Institutional aspect	Whether the Center has enough capacity to sustain the achievement of the project	Whether the Center has introduced any measure to strengthen its capacity	Whether there is mid and long-term management plan		JICA presented the guideline for the formulation of a management plan and dispatched the Japanese expert for Management Plan and Financial Strategy in October 2007. Although the Project Manager has drafted a management plan by using MS Project, the plan is shared among the stakeholders.
			Whether there is human resources development plan	Interview with C/Ps	The Center provided subsidies to the lectures for their study tour.
			Risk of staff's turnover		Some staff members seem to have been demoralized due to a few reasons including the low level of their salary compared to IT engineers of the private sector. Their motivation would decrease further after the end of the Project, as they have no chance to receive technology transfer from the Japanese experts. Some of them may even leave the Center from now on.
			Staffs' capacity	Interview with C/Ps	The Japanese expert stressed that C/Ps have got enough capacity to maintain courses, revise the curricula and training materials. Results of the questionnaire and the interview, C/Ps revealed their confident.
			Possibility of other donors'	Interview with C/Ps	The Project Manager revealed that EBRD has approached to the Center for future cooperation.
		Whether there is enough support from the Government.			Tutorial Committee, a managing body of the Center, was established with members of high rank officials, but the Committee has not been active. Premises will not be varied from May 2009.
Financial aspect	Whether the Center can be financial sustainable	Financial situation and prospect of the Center			The Government will provide subsidy of 3 million som annually till 2011. Japan's Financial strategy analyzed in Oct 2007 that the Center can survive with the subsidy from the government and tuition fees that is more than 2 million som, although machines and equipment's extinguishment is not considered. If the extingshment is considered which is estimated 3.6 million som for 10 years, the Center needs 6 million som in addition. The break even point would be 13 million som. The Center is not exempt from income tax and duty, although it is public educational institution.

Annex18. Attendees of the Meetings for the Final Evaluation

1. The Japanese Side

(1) The Final Evaluation Team

Mr. Hiroyuki Ide	Team Leader
Mr. Tadao Tamukai	Cooperation Planning
Mr. Atsushi Tokura	Evaluation Analysis

(2) JICA Kyrgyz Republic Office

Mr. Hideaki Maruyama	Resident Representative
Mr. Tokuji Yoshimura	Assistant Resident Representative

(3) Japanese Experts

Mr. Masamichi Iwamoto	Expert

2. The Kyrgyz Republic Side

(1) The Final Evaluation Team

Ms. Dinara Uturova	Office of the President
Mr. Erkin Asrandiev	Office of the President
Mr. Akylbek Aidaraliev	Prime Minister Office
Ms. Ainura Mavlyanova	Ministry of Finance
Mr. Edilbek Moldoev	Ministry of Education and Science
Mr. Almaz Bakenov	National IT Center
Ms. Asel Isaeva	National IT Center

(2) Ministry of Transport and Communications

Ms. Chynara Suyunbaeva	Deputy Minister
Ms. Aizada Borubaeva	Head of IT Department

付属資料２． Project Design Matrix

プロジェクト名: キルギス共和国 IT 人材育成プロジェクト（国立 IT センター） 第一フェーズ

ターゲットグループ: 国立 IT センタースタッフ　　**ターゲット地域:** 国立 IT センター　**期間:** 2 年（最大）　　（2004 年 8 月 12 日）

プロジェクト要約	指標	指標入手手段	外部要因
上位目標　N/A	N/A	N/A	
プロジェクト目標 国立 IT センターにおいて、JICA からの本格的な技術移転を受け入れられる体制が整う	1. キ国側投入が予定通り実施される（例：センター人員の確保、プロジェクトサイトの改修、政府補助金の支出） 2. 財政面での健全な運営のための諸条件が満たされる（例：免税、政府補助金の継続支出、授業料をセンター運営費に充当すること） **※ 達成され次第、第二フェーズを開始し、未終了の活動は第二フェーズに引き継がれる**	JICA 事務所が行う調査結果	
成果 1. プロジェクト運営体制が確立する 2. JICA 専門家からキ国講師への技術移転プロセスが確立する 3. 受講生募集のプロセスが確立する 4. JICA の技術協力に必要な、各種申請についてキ国側スタッフが理解する 5. 技術進歩や市場の変化が把握される 6. 機材が整備される	1. 必要な能力を持ったキ国側スタッフが配置される（所長 1 名、教務課長 1 名、講師 6 名） 2. 第一フェーズ終了時までに技術移転マニュアルが作成される 3-1. コース定員決定の参考となる、潜在的受講生数に関するレポートが作成される 3-2. 第一フェーズ終了までに募集マニュアルが作成される（例：募集スケジュール、宣伝方法、申込方法、受講生選抜方法） 4. A1,A2A3,A4 等の申請書作成マニュアルが作成される 5. 第二フェーズ開始前に必要な修正がプロジェクトドキュメント（PDM を含む）に加えられる	1. プロジェクトのモニタリングレポート 2. 技術移転手順書 3-1. IT 市場調査レポート 3-2. 生徒募集手順書 4 キ国側が作成した、第二フェーズのための申請書 5. プロジェクトドキュメント改定案	ローカルコスト負担によって、キ国側スタッフへ民間に劣らない十分な待遇が保証される キルギス国の IT 政策が変更しない

	5. 登録簿が定期的に更新されている。	6. 登録簿	
Activities 1-1）所長、事務スタッフ、技術スタッフを配置する 1-2）スタッフの業務指示書を作成する 1-3）各部署の予算と活動計画を作成する 1-4）活動・予算執行状況をモニタリングする 2-1）短期専門家からキ国側講師への技術移転を実施し、コースカリキュラム、テキスト、補助教材、講師用サブジェクトマニュアルを作成する 2-2）短期コースを実施する 2-3）改善点をレポートにまとめる 3-1）大学、IT 企業等を訪問調査し、受講者数を予測する 3-2）センターの広報活動を行う 3-3）センターのホームページを立ち上げる 3-4）受講生募集方法を検討し、短期コース募集に実践するとともに、募集手順書とコース案内を作成する 4-1）短期専門家、機材供与、研修の申請をキ国側スタッフが行えるよう、JICA 専門家が支援する 5-1）技術進歩、市場の変化を調査する 5-2）ニーズ調査に役立てるため、IT 企業・IT 教育機関等と最新技術動向に関するシンポジウムを開催する 6-1）機材とソフトウェアを調達する 6-2）機材のインベントリシステムを開発して、登録簿を作成する 6-3）機材の運用・保守を行う	投入 キルギス側 1. カウンターパート（プロジェクトダイレクター、プロジェクトマネージャー、教務課長、講師 6 名）、その他スタッフ 2. 必要な機材を備えた改修済み施設 3. 年間予算：500 万ソム 日本側 1. 長期専門家（チームリーダー、業務調整） 2 年 * 状況によって、チームリーダーの代わりに短期専門家を派遣することもありうる。 2. 短期専門家（データベース、ネットワーク） （キルギス滞在 2M/M） 3. 短期コース実施に必要な機材 4. 本邦研修 （プロジェクトダイレクター、プロジェクトマネージャー、教務課長）		前提条件 キルギス政府がプロジェクト実施のための予算手当など必要な支援を行う キルギス国の関係機関の協力が得られる

Project Design Matrix （第４回 JCC での改訂、2007 年 3 月 20 日）

プロジェクト名:　キルギス共和国 IT 人材育成プロジェクト（国立 IT センター） 第二フェーズ

ターゲットグループ:　潜在的な、及び現在、業務に従事している IT 技術者　　**ターゲット地域:** キルギス共和国全体　　**期間:** 3 年

プロジェクト要約	指　　標	指標入手手段	外部条件
上位目標 キルギス共和国内の IT 市場で必要とされる高度 IT 技術者が、十分に供給される	1. NITC 研修修了生の数が定常的に前年に比べて増加する	センターの修了生に関する記録	
プロジェクト目標 国立 IT センター（以下、センター）が、第二フェーズ終了時点において、高度なレベルの IT 技術者の研修機関として適切に機能する	1. プロジェクト期間中、420 名以上が NITC コースを修了する（短期コース 400 名、ディプロマコース 20 名） 2. 研修生を派遣する雇用主の 75%以上がセンター研修修了生の向上した能力に満足する 3. 研修生の 80%以上がセンターに満足する 4. センターが財務面で自立可能になる	1. センターの修了生に関する記録 2. センターで実施した調査の結果 3. センターで実施した調査の結果 4. センターの財務資料	1. 一般的な経済状態が悪化しない。 2. キ国政府の IT 政策が変化しない。 3. IT 技術者の頭脳流出が一定の範囲にとどまる。
成果 1. C/P（カウンターパート）のスキルが向上する 2. 研修コースカリキュラムが適切に準備され、毎年、更新される 3. 研修に必要な施設と機材が適切に整備される 4. 研修教材と講師用サブジェクトマニュアルが適切に整備される 5. 研修コースが適切な品質で運営される 6. 第三国研修が適切な品質で実施される。	1-1. すべての講師が日本人専門家の認定する一定の高いレベルに到達する 1-2. 研修生の 80%が講師に満足する 2-1. すべてのコースカリキュラムが第二フェーズ開始後 1 年以内に準備され、毎年、更新される 2-2.　C/P だけでコースカリキュラムの更新ができる 3. 登録簿が定期的に更新されている 4-1. 研修生の 80%が教材に満足する 4-2. C/P だけで教材とサブジェクトマニュアルの更新ができる 5-1. 研修コースを成功裏に修了（合格）した者の比率がプロジェクト期間中の平均で 70%以上になる 5-2. 研修生の 80%以上が研修コースに満足する	1-1. 専門家の活動記録 1-2. コース終了時の参加者へのアンケート調査結果 2-1. センター活動の記録 2-2. センター活動の記録、専門家の活動記録 3. 登録簿 4-1. コース終了時の参加者へのアンケート調査結果 4-2. センター活動の記録、専門家の活動記録 5-1. センター活動の記録 5-2. コース終了時の参加者へのアンケート調査結果	権威のある証書が研修の修了者に授与される。

活動 1-1. カウンターパートの技術移転計画を策定する 1-2. 講義と実地を通じ、日本側からカウンターパートへの技術移転を行う 2-1. ニーズ調査を行う 2-2. コースカリキュラムを作成する 2-3. コースカリキュラムを更新する 3-1. トレーニングに必要な機材と必要なソフトウェアのリストを確認する 3-2. 機材とソフトウェアを調達する 3-3. 登録簿を更新する 3-4. 機材の運用・保守を行う 4-1. 研修教材（テキスト、補助教材、講師用サブジェクトマニュアル）のドラフトを作成する 4-2. 研修教材（テキスト、補助教材、講師用サブジェクトマニュアル）を作成する 4-3. 研修教材（テキスト、補助教材、講師用サブジェクトマニュアル）を更新する 5-1. コース案内書を作成する 5-2. 受講生を募集する 5-3. 研修を実施する 5-4. 必要に応じて各種シンポジウムを開催する 5-5. 定期的に研修コースを評価する（訓練生、雇用主へのアンケートを含む） 5-6. 定期的に研修コースを見直す 5-7. 広報活動を実施する 5-8. 管理、財務、事務の業務を行う 5-9. プロジェクトの進捗をモニタリングする 6.-1 第三国研修の実施を支援する	投入 キルギス側 1. カウンターパート(プロジェクトダイレクター、プロジェクトマネージャー, 教務課長, 講師 6 人) 、その他スタッフ 2. 必要な機材を備えた改修済み施設 3. 年間予算: 500 万ソム以上 日本側 1. 専門家: 長期 (チームリーダー、業務調整), 2. 短期 (IT 教育、基本ソフトウェア, 開発用言語, ネットワーク開発, データベースマネジメントシステムとデータベース開発, システム開発手法, 各種業務知識) 3. トレーニングに必要な機材（サーバ、パソコン、ソフトウェアなど） 4. 本邦研修	本プロジェクトにおけるキルギス側のカウンターパートがセンターにとどまる。 前提条件 第一フェーズが終了する。

付属資料3. 評 価 グ リ ッ ト

1.実績の検証

評価項目	評価調査項目		判断方法	必要な情報・データ	情報源・情報収集の方法	評価
	大項目	小項目				
投入の実績	投入は計画通り実施されたか		計画と実績の比較	投入は計画通り行われたか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書 ・直近の情報に関しては質問票と現地インタビューで収集する。	
				計画通り行われなかった場合、弊害は生じたか。	・専門家業務完了報告書 ・直近の情報に関しては質問票と現地インタビューで収集する。	
				弊害に対して何らかの対応策を講じたか。	・専門家業務完了報告書 ・直近の情報に関しては質問票と現地インタビューで収集する。	
成果の達成状況	成果は計画通り達成する見込みか	カウンターパートのスキルは向上しているか。	指標の達成度	日本人専門家の認識	・報告書あり。	
				研修参加者による評価	・報告書あり。ただし2007年10月以降のデータを収集する必要あるので、質問票で対応する。	
		研修コースカリキュラムが適切に準備され、毎年更新されているか。	指標の達成度	毎年更新されているか。	・2006年10月までは専門家業務完了報告書でフォロー。	
				カウンターパートだけで更新できるか。	・日本人コンサルタントによる評価。直近の評価に関してはインタビューで収集。	
		研修に必要な施設と機材が適切に整備されているか。	指標の達成度	登記簿が定期的に更新されているか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書 ・現地で確認	
				施設や機材の整備状況	・現地で確認	
		研修教材と講師用サブジェクトマニュアルが適切に整備されているか。	指標の達成度	研修参加者の教材に関する満足度	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、現地インタビューで収集。	
				カウンターパートだけで更新できるか。	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、現地インタビューで収集。	
		研修コースが適切な品質で運営されているか。	指標の達成度	修了した研修生の比率	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、現地インタビューで収集。	
				研修生のコースに関する満足度	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、現地インタビューで収集。	
		第三国研修が適切な品質で実施されているか。	指標の達成度	修了した研修生の比率	・日本人コンサルタントチーム報告書	
				研修生のコースに関する満足度	・日本人コンサルタントチーム報告書	
プロジェクト目標の達成状況	プロジェクト目標は計画通り達成される見込みか。	センターは適切に機能しているか。	指標の達成度	コース修了生の数	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、月例報告書を参照	
				研修生の雇用主の満足度	・センターで実施したアンケート結果 ・直近の情報に関してはアンケート、インタビューを実施する。	
				修了生のセンターに対する満足度	・センターで実施したアンケート結果 ・直近の情報に関しては現地で収集する。	
				センターの財務状況	・2007年度財務データを現地で収集する。	
上位目標の達成状況	上位目標は達成される見込みか。	修了生の数が毎年増加しているか。	指標の達成度	毎年の修了生の数	・日本人コンサルタントチーム報告書 ・直近のデータに関しては、現地で収集する。	

付属資料3. 評 価 グ リ ッ ト

2.達成のプロセス

活動の実施状況	活動は計画通り実施されているか。		計画と実績の比較	・計画通り実施されなかった活動の抽出。	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、月例報告書を参照	
				・弊害は生じたか。	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、月例報告書を参照 ・必要に応じてインタビューで確認	
				・講じた対応策はあるか。	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、月例報告書を参照 ・必要に応じてインタビューで確認	
モニタリングの実施状況	モニタリングは適切に実施されているか。		モニタリングの実施回数と内容	・ モニタリング報告書の作成回数、時期。	・日本人コンサルタントチーム報告書 ・直近の情報に関しては、月例報告書を参照	
				・ モニタリング結果が本プロジェクトの改善に活用されたか。	・インタビューで確認	
				・ JCCの開催状況	・専門家業務完了報告書 ・月例報告書	
専門家とカウンターパートの関係	技術移転は円滑に行われているか。		カウンターパートの能力向上の状況	・定期的にミーティングは行われているか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書	
				・カウンターパートの期待に応えて専門家は技術移転を行っているか。	・アンケート結果あり（日本人コンサルタントチーム報告書）。 ・カウンターパートへのインタビュー	
				・カウンターパートは技術移転のために十分時間を費やしているか。	・アンケート結果あり（日本人コンサルタントチーム報告書）。 ・カウンターパートへのインタビュー	
				・カウンターパートの能力は適切か。	・アンケート結果あり（日本人コンサルタントチーム報告書）。	
				・プロジェクトによってカウンターパートの能力は向上しているか。	・アンケート結果あり（日本人コンサルタントチーム報告書）。 ・カウンターパートへのインタビュー	
カウンターパートのオーナーシップ	カウンターパートが主体性を持ってプロジェクトを運営しているか。		カウンターパートの態度	・カウンターパートは自主的に活動を行っているか。	・日本人コンサルタントチーム報告書 ・日本人コンサルタントチームへのインタビュー	
マネジメント体制	日本のプロジェクト実施体制は適切か。		JICA本部、在外事務所のフォロー状況	・JICA本部、キルギス事務所は適切に対応しているか。	・日本人コンサルタントチームへのインタビュー	
				・民活技プロは有効に機能しているか。	・日本人コンサルタントチームへのインタビュー ・JICA社会開発部、キルギス事務所へのインタビュー	
	センターの内部統制が機能しているか。		規則に基づいて活動、予算執行がなされているか。	・必要な規則が導入されているか。	・質問票、現地でインタビュー	
				・規則を遵守しているか。	・日本人コンサルタントチームへのインタビュー ・カウンターパートへのインタビュー	
				・プロジェクト関連予算と執行額の経年推移	・現地で財務報告書確認	
				・予算と執行額に乖離がある場合はその理由。弊害は生じていないか。	・カウンターパートへのインタビュー	

付属資料3. 評 価 グ リ ッ ト

3.評価5項目による評価　－妥当性

評価項目	評価調査項目		判断方法	必要な情報・データ	情報源・情報収集の方法	評価
	大項目	小項目				
必要性、優先度	本プロジェクトはキルギスの政策に現在でも合致しているか。	本プロジェクトはキルギスITセクター育成支援として適切か。	IT政策に変化はあるか。	ICT戦略に変更はあるか。	・インターネット上で確認。 ・大統領府へのインタビューで確認。	
				ICT審議会の活動状況。	・インターネット上で確認。 ・大統領府へのインタビューで確認。 ・カウンターパートに確認。	
	ターゲットの選択は正しいか。		IT企業のニーズと整合しているか。	IT企業のニーズと一致しているか。	・日本人コンサルタントチーム報告書 ・現地インタビュー	
			ターゲットグループの妥当性	「現在業務に従事しているIT技術者」以外の参加者の割合	・日本人コンサルタントチーム報告書	
	プロジェクトは日本の援助方針と整合しているか。		国別援助計画との整合しているか。	・対キルギス国別援助計画でIT分野の協力に関する記述があるか。	・対キルギス国別援助計画	
			国別事業実施計画と整合しているか。	・対キルギス国別事業実施計画でIT分野の協力に関する記述があるか。	・対キルギス国別事業実施計画	
手段としての適切性	日本の技術的な優位性		日本に優位性がある分野か。	・日本の技術が蓄積されている分野か。	・日本人コンサルタントへのインタビュー	
				・人材の確保は容易であったか。	・JICA社会開発部へのインタビュー	
	民活技プロを採用したことの適切さ			上記に同じ		
その他	中間評価以降、キルギスの社会経済に変化があったか。		革命の影響はあったか。	2005年の革命は組織体制、財政、運営などに影響を及ぼしたか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書	

3.評価5項目による評価　－有効性

評価項目	評価調査項目		判断方法	必要な情報・データ	情報源・情報収集の方法	評価
	大項目	小項目				
目標の達成	プロジェクト目標の達成見込み			・上記に同じ		
因果関係	プロジェクト目標達成の貢献・阻害要因は何か。		目標達成に影響を与える要因は何か。	・目標達成を阻害となる障害があるか。	・日本人コンサルタント、カウンターパートへのアンケート、インタビュー	
	成果によってプロジェクト目標が達成されるか。		成果はプロジェクト目標を達成するのに十分か。	・財務面での自立度	・上記に同じ	
			外部条件の状況	・「権威のある証書」は発行できているか。	・修了生、修了生の雇用主へのアンケート、インタビュー	

3.評価5項目による評価　－効率性

評価項目	評価調査項目		判断方法	必要な情報・データ	情報源・情報収集の方法	評価
	大項目	小項目				
成果の達成状況	成果は達成する見込みか。			上記に同じ		
成果と投入の因果関係	投入の適切さ(投入は規模、質、タイミングの点で適切か)。	専門家の派遣は適正であったか（数、派遣の時期、専門領域、人選方法の適切さ等）。	計画と実績の比較	・専門家派遣は予定通り実施されたか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書	
				・もし予定と乖離したなら、その際に弊害は生じたか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書 ・コンサルタントへのインタビュー ・カウンターパートへのインタビュー	
				・専門家の専門領域、能力は適切であったか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書 ・カウンターパートへのインタビュー	
		供与機材の項目、仕様、投入時期。	計画と実績の比較	・機材の供与は予定通り実施されたか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書	
				・もし予定と乖離したなら、その際に弊害は生じたか。何らかの対応策が講じられたか。	・コンサルタントへのインタビュー ・カウンターパートへのインタビュー	
				・機材は使用されているか。各機材の使用頻度。	・現地でチェック	
				・機材の管理方法。責任者、管理台帳の有無。	・現地でチェック	
		本邦研修生の数、研修分野、研修内容、派遣の時期。	計画と実績の比較	・本邦研修は予定通り実施されたか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書	
				・もし予定と乖離したなら、その際に弊害は生じたか。何らかの対応策が講じられたか。	・コンサルタントへのインタビュー ・カウンターパートへのインタビュー	
				・研修内容は適切であったか。	・カウンターパートへのインタビュー	
				・研修の成果は業務で活用されているか。	・カウンターパートへのインタビュー	
		キルギス側C/Pの数、能力、配置の時期。	計画と実績の比較	・C/Pの数は予定通り確保されたか。	・専門家業務完了報告書 ・日本人コンサルタントチーム報告書 ・コンサルタントへのインタビュー	
				・弊害は生じたか。弊害があった場合は何らかの対応策が講じられたか。	・日本人コンサルタントチーム報告書 ・コンサルタントへのインタビュー	
				・C/Pの能力は十分であったか。	・コンサルタントへのインタビュー	
				・C/Pが離職する恐れはあるか。	・コンサルタントへのインタビュー	
		建物・施設の条件、環境等。		・キルギス側が提供したスペースは十分であったか。弊害があった場合は何らかの対応策が講じられたか。	・コンサルタントへのインタビュー	
				・維持管理費の推移。	・現地でチェック	
				・専門家の執務室は十分か。	・コンサルタントへのインタビュー	
		キルギス側財政負担		・今まで生じた弊害	・カウンターパートへのインタビュー	
				・今後の見通し	・カウンターパートへのインタビュー	

付属資料3. 評 価 グ リ ッ ト

3.評価5項目による評価　－インパクト

評価項目	評価調査項目		判断方法	必要な情報・データ	情報源・情報収集の方法	評価
	大項目	小項目				
上位目標の達成見込み	プロジェクトによって上位目標は達成される見込みが有るか。			・上記に同じ。		
因果関係	上位目標とプロジェクト内容の因果関係		プロジェクト目標と上位目標の間の外部条件の確認	・ 経済状況の確認	・GDPなどの推移	
				・IT政策の変化	・上記に同じ	
				・ 修了生の頭脳流出の状況。	・修了生、修了生の雇用主へのアンケート、インタビュー	
	政策、制度などへの正負のインパクト	IT政策へのインパクト	本プロジェクトの貢献度	・IT政策の変化はあったか。	・上記に同じ	
	社会面でのインパクト	ジェンダーへのインパクト		・修了生に占める女性の修了生。	・日本人コンサルタントチーム報告書 ・直近のデータに関しては、現地で収集する。	
	技術面でのインパクト	キルギスのIT技術に影響を及ぼすか。		・ 本プロジェクトによってIT技術が改善する見込みか。	・コンサルタントへのインタビュー ・カウンターパートへのインタビュー	

3.評価5項目による評価　－自立発展性

評価項目	評価調査項目		判断方法	必要な情報・データ	情報源・情報収集の方法	評価
	大項目	小項目				
政策面	IT産業振興の重要性は継続されるか。		政策の変化。IT産業の規模の変化	・上記に同じ。		
組織面	センターはプロジェクトの成果を維持する能力を持っているか。			・今後の人材育成計画の有無	・カウンターパートへのインタビュー	
				・ センタースタッフの離職の傾向。	・日本人コンサルタントチーム報告書 ・月例活動報告 ・カウンターパートへのインタビュー	
				・センタースタッフのモチベーション	・カウンターパートへのインタビュー	
				・政府や他ドナーからの支援状況	・カウンターパートへの質問票、インタビュー	
財政面	本プロジェクトの効果を持続させるために必要な予算措置が講じられるか。		センターの財務状況の確認	・上記に同じ。		
技術面	移転された技術は持続するか。		機材のメンテナンス計画、技術普及計画	・機材のメンテナンス計画はあるか。	・カウンターパートへの質問票、インタビュー	
				・今後の技術取得計画。	・カウンターパートへの質問票、インタビュー	

付属資料４

Situation in IT Market in Kazakhstan

※この情報は、終了時評価の通訳であったアントン氏が、主に Internet のロシア語サイトを通じて収集した情報である。カザフスタンの現地調査に基づいたものではないため、カザフ市場概況を理解する目安として捉えるべきである。

Number of local software companies in KZ
By the experts research there are about 1000 IT industry companies registered in KZ (Kazakhstan Association of IT Companies, “Program of IT industry Development 2008-2010”).
According to the article of Computer Magazine (http://www.ccm.kz/), there was 40 software development companies in Kazakhstan (December, 2005).

Salary of IT engineer
According to famous internet forum in KZ- http://www.bb.ct.kz , average salary is $3-3.5 thousands.

Total software market volume
Total revenue of IT industry market is about 13 billion Kzt (about $108 million) (Kazakhstan Association of IT Companies, “Program of IT industry Development 2008-2010”).

According to the interview with Oracle representative in Kazakhstan, software market is about $50-60 million (including applications for business- $20 millions)(2006).

One of the biggest Kazakh software company “New Age Technologies” is making report that software market volume was $100 millions in 2001, it was increased to $200 millions in 2002 and it is expected to be about $500 million in 2003 (http://www.nomad.su/?a=17-200306060024).

Major foreign software companies working in KZ market
SAP, Oracle, Microsoft, Epicor-Scala, Cisco Systems and others (http://www.ccm.kz).

Category of business which requires the software development
Big software companies provide the products to companies in oil-gas industry, banks, ICT and transport sectors. For example, SAP is doing activities in oil-gas sector, because it’s solution for this industry is recognized by international standards. Main clients of SAP is “KazTransOil”, PetroKazakhstan, “KazMunaiGaz”, big companies in steel, ICT, transport and financial sectors: “Kazakhtelecom”, GSM Kazakhstan, Mittal Steel Temirtau, “Kazakhstan Railroad”, “International Airport Almaty”, “Nation Bank of Kazakhstan”. About 300 companies are using Oracle solutions: “National Bank”, “Bank TuranAlem”, “Nurbank” and others (http://www.ccm.kz).

ERP system, managing Database system is very popular not only among business companies, but also Government is ordering such systems. Now Government may spend from $10 thousand to $100 thousands for these solutions.

Local software companies develop some package soft, but scale is too small (e-map soft, language soft and others). They try to be a partner of some international vender and do distribution and localization of it's solution, because developing new products takes too much recourses (http://www.continent.kz/2006/11/4.htm).

KZ software industry association

Kazakhstan Association of IT Companies was established in April, 2004. Now 34 companies are members of this Association.

Purposes of Association:

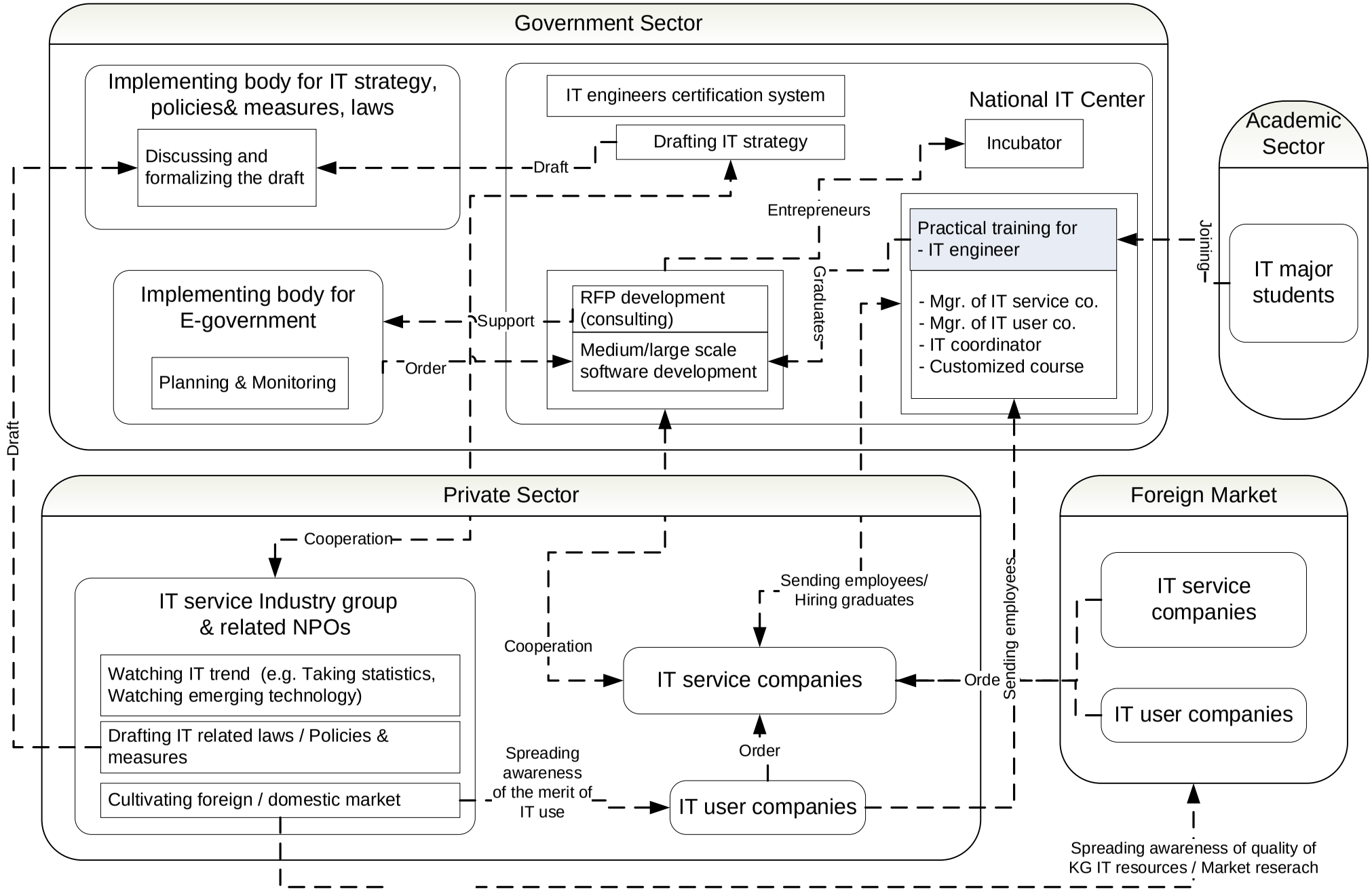
- protection and lobbing of members' interests in government structure, international and social organizations
- protection of members' interests in local market, including expansion of foreign companies
- representative of Association in various organizations, including international events, and events linked to questions of development IT in Kazakhstan
- supporting members of Association in questions of development, testing, integration and promotion of new network products and applications, and if it is necessary coordination of members' activity

Home page: http://www.itk.kz

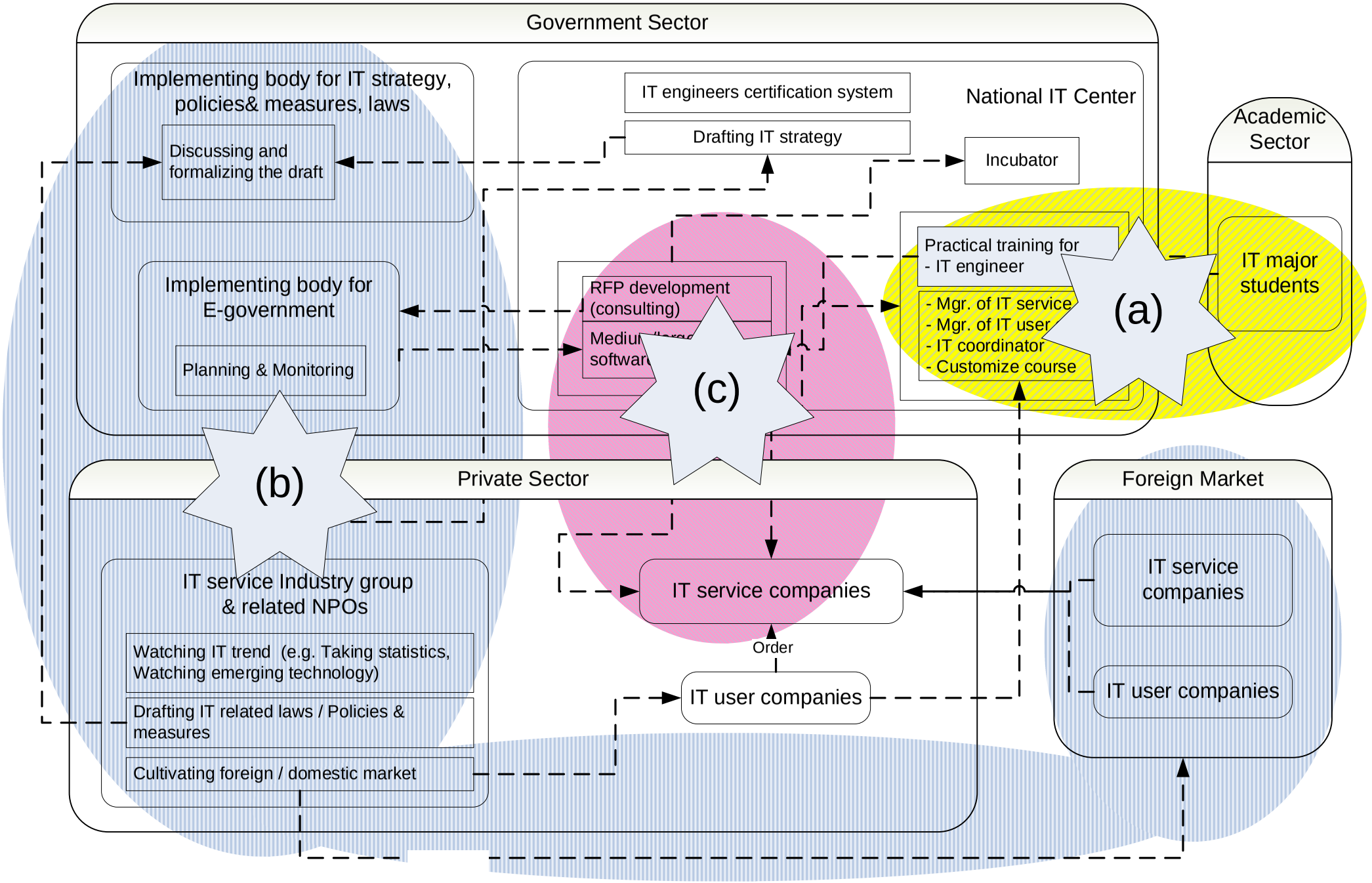
National Strategy

In National Strategy "Kazakhstan- 2030" emphasized importance of ICT and infrastructure development (http://www.aic.gov.kz/docs/Стратегия%202030.doc).

付属資料5: キルギスITサービス産業 コンセプト図



付属資料6： 想定される協力



付属資料７

QUESTIONNAIRE

for

Project for IT Human Resource Development in the Kyrgyz Republic (National IT Center)

I. Objective of Terminal Evaluation

Every JICA project is evaluated at different stages during the project cycle as seen in Figure 1 below[1]. Evaluation is a tool for judging as objectively as possible the relevance and effectiveness of JICA's cooperation activities at four stages, namely ex-ante, mid-term, terminal and ex-post.

In general, six months prior to the completion of the project, terminal evaluation is conducted to evaluate whether the Project will achieve the expected outputs and the project purpose. The result of the terminal evaluation is utilized to conclude whether it is appropriate to complete the project or necessary to extend follow-up cooperation, and to draw lessons which can be applied to other similar JICA projects.

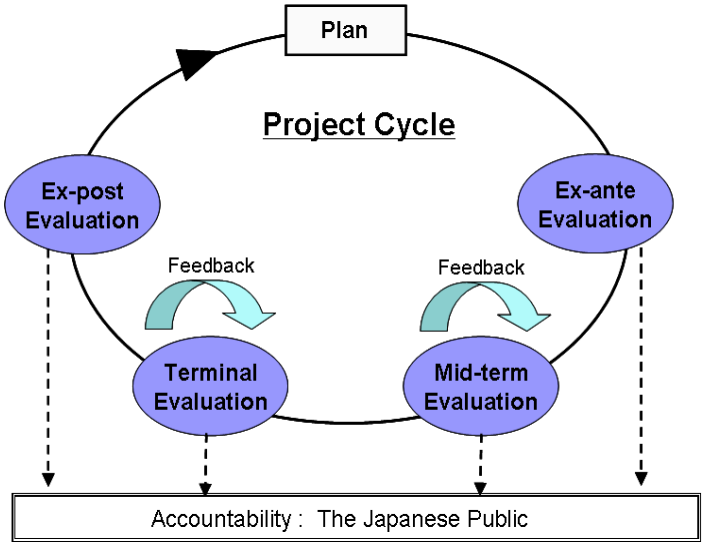


Figure 1: Evaluation Types by Stages during the Project Cycle

II. Terminal Evaluation: Project for IT Human Resource Development in the Kyrgyz Republic (National IT Center)

Purpose of Terminal Evaluation is as shown below.

(1) To review and confirm the achievement and implementation process of the Project based on the documents such as the Record of Discussion (R/D) and the Project Design Matrix (PDM).

(2) To evaluate the activities and achievement in terms of five evaluation criteria, namely relevance, effectiveness, efficiency, impact and sustainability.

(3) To conclude whether the Project has achieved the purpose and realized the outputs and to clarify issues and their countermeasures towards the end of the Project.

(4) To share a common understanding among stakeholders regarding recommendations for further improvements of the Project and the lessons that can be applied to other similar ongoing and future JICA projects

To discuss future cooperation between JICA and the Kyrgyz Government towards the IT human resource development in the Kyrgyz Republic

[1] Due to the shorter project period of three years, no mid-term evaluation was carried out.

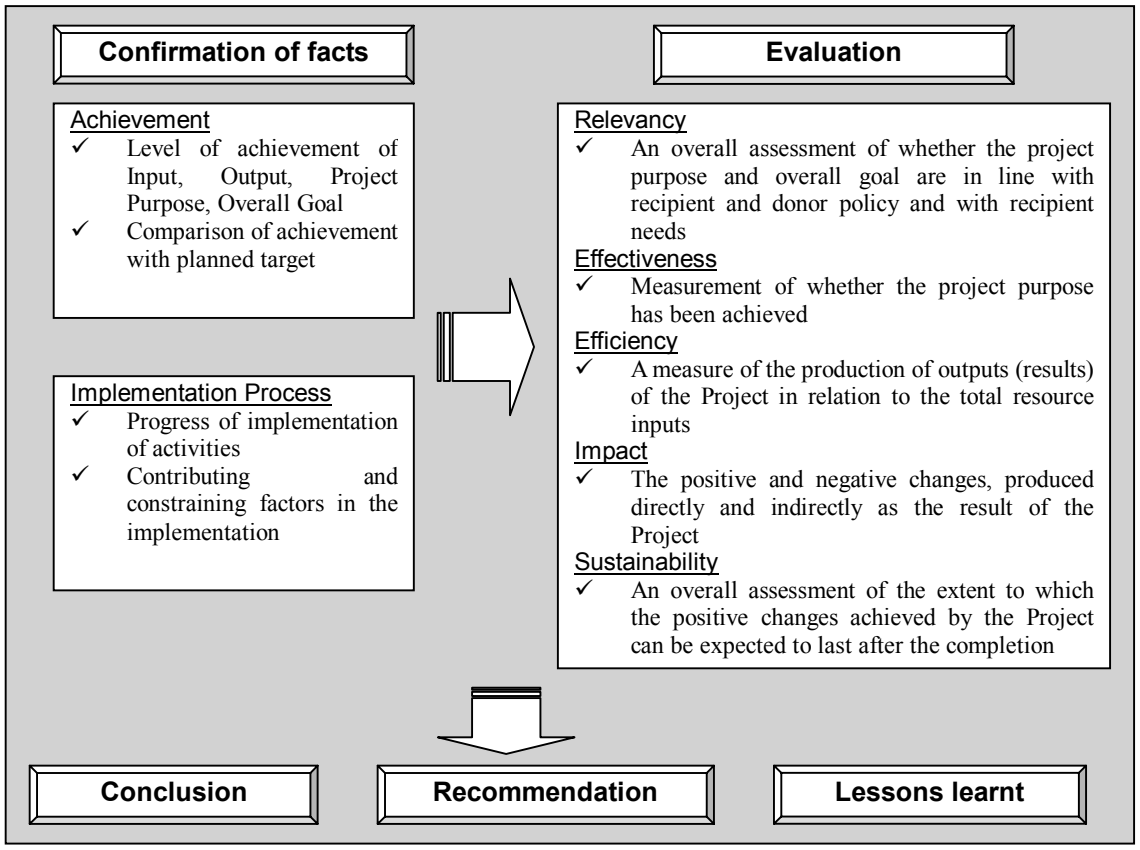


Figure 2: Structure of Terminal Evaluation

III. Survey Method for Terminal Evaluation

A series of questionnaires and interviews are to be conducted for different groups. Those are not only intended to evaluate the achievement of the Project but also to identify contributing and constraining factors of such situations.

It is planned to have a workshop to discuss a future prospect of NITC. All staff of the Center, the Japanese experts and other stakeholders will be invited. The aim of the workshop is to clarify the present situation of the Center and its potential, and to exchange the views towards the development of the Center.

Questionnaire for Counterpart Personnel

Name: _____

Organization and designation: _____

Period of your engagement in the Project : _____ ~ _____

1. Your duties in the Project

1.1 Could you kindly describe your duties in the Project?

2. Achievement of the Project

<Output>

According to the Project Design Matrix, the lectures of the Center are supposed to gain enough capacity to revise curricula and develop training materials by themselves.

2.1 Do you think you have gained enough skills and knowledge to revise the curricula by yourself? If not, please state necessary skills.

❑Yes ❑No

2.2 Do you think you have gained enough skills and knowledge to update training materials by yourself? If not, please state necessary skills.

❑Yes ❑No

According to the Project Design Matrix, the facilities and equipment necessary for training are properly

prepared.

2.3 Do you think the facilities and equipment are well maintained? If not, please state which facility or equipment is not maintained well.

❑Yes, adequate ❑No, adequate

3. Implementation Process

I understand that a meeting among the staff is supposed to be held every week.

3.1 Do you always participate in the meeting? If not, please state the reason.

❑Yes ❑ No

Significance of JICA project is technical transfer through interpersonal communication.

3.2 Have Japanese long-term experts and short-term experts been dispatched adequately in terms of their expertise, number of experts, period and timing in order to carry out the planned activities? If inadequate, how do you think it could be improved?

❑Yes ❑ No

JICA proposed “Guidance for the formulation of Management Plan” in November, 2006.

3.3 Are you aware of this guidance? If yes, please describe how you utilize it.

❑Yes ❑No

4. Relevance

5. Effectiveness

6. Efficiency

6.1 Have activities been sufficient to produce the outputs? Are there any activities that you would like to request for the rest of the project period?

❑Yes ❑ No

6.2 Was the provision of equipment adequate in terms of variety, quantity and timing? If inadequate, how do you think it could be improved?

❑Yes, adequate ❑No, adequate

6.3 Is all equipment used regularly? If not, please state equipment which is not regularly used and the reasons for that.

❑Yes ❑ No

6.7 (Only for those who participated in trainings in Japan) Was the training useful? If so, what was especially useful? If not useful, how do you think the training could be improved?

❑Yes, useful ❑No, useful

6.8 Role of the project director has not been clarified and the post was sometimes vacant. Is there any negative impact on the project implementation? If so, please state an example.

7. Impact

7.1 Have you acquired any technology or skill from the Japanese experts, which is not available in Kyrgyz? If yes, please state the newly acquired one?

❑ Yes ❑ No

8. Sustainability

8.1 Can you describe your motivation to stay in the Center?

9. Others

9.1 Do you have any other comments?

Thank you for your cooperation!

Project for IT Human Resource Development in the Kyrgyz Republic (National IT Center)

Questionnaire for former trainees

Six months prior to the completion of the project, terminal evaluation is conducted to determine whether the Project will achieve the expected outputs and the project purpose. The result of the terminal evaluation is utilized to conclude whether it is appropriate to complete the project or whether it is necessary to extend a follow-up cooperation.

We understand courses are carried out as planned and the participants were generally satisfied with their training courses.

We would like to know your assessment on the training course at the present such as the relevance of the courses for your work and the impact on your performance. It is very appreciated if again you could answer the following questions.

Q1. Are you still satisfied with the training course at this moment? If so, please state the reason as well.

❒Yes, very much ❒Yes ❒No ❒Other

Q2. Are you still satisfied with the general level of the training organization at this moment? If so, please state the reason as well.

❒Yes, very much ❒Yes ❒No ❒Other

Q3. Is your training course relevant to your work? Have you ever had a chance to use the newly acquired skills for your work? If so, please state an example.

❒Yes, very much ❒Yes ❒No ❒Other

Q4. Have you improved your performance in the office because of the training course? If so, please state an example.

❒Yes, very much ❒Yes ❒No ❒Other

Your job description:

❒IT engineer at IT company
❒IT engineer at non-IT company (IT user company)
❒IT user at non-IT company (IT user company)
❒Staff of a government institution
❒Lecture of an educational institution,
❒Student
❒Other ( )

Evaluation team for the Project “IT Human Resource Development in the Kyrgyz Republic (National IT Center)

Project for IT Human Resource Development in the Kyrgyz Republic (National IT Center)

Questionnaire for the employees of former trainees

Six months prior to the completion of the project, terminal evaluation is conducted to determine whether the Project will achieve the expected outputs and the project purpose. The result of the terminal evaluation is utilized to conclude whether it is appropriate to complete the project or whether it is necessary to extend a follow-up cooperation.

We understand courses are carried out as planned and the participants were generally satisfied with their training courses.

We would like to know your assessment on the training course at the present such as the relevance and effectiveness of the courses. It is very appreciated if you could answer the following questions.

Q1. How many staff of your entity has attended the training courses at the Center?

Q2. Has your staff improved his (her) productivity and quality of work after the training? If yes, please state an example.

❒Yes, very much ❒Yes ❒Yes, but slightly ❒No ❒Other

Q3. Do you think it is effective for your organization to send your staff to the training courses at the Center? If not, please state the reason.

❒Yes, very much ❒Yes ❒Yes, but slightly ❒No ❒Other

Your company description:

- ❒ IT company
- ❒ Non-IT company (IT user company)
- ❒ Government institution
- ❒ Educational institution
- ❒ Other ( )

Evaluation team for the Project “IT Human Resource Development in the Kyrgyz Republic (National IT Center)

Data about Personal Computers Using in Companies in 2006

	Amount of PC		Pentium IV and higher		Purchased PC during the year	
	units	percentage to the whole amount	units	percentage to the whole amount	units	percentage to the whole amount
Kyrgyz Republic	63535	100	28912	45.5	9799	15.4
Batken region	2048	3.2	758	2.6	303	3.1
Jalal-Abad region	3485	5.5	1298	4.5	401	4.1
Issyk-Kul region	3929	6.2	1509	5.2	454	4.6
Naryn region	2140	3.4	650	2.2	226	2.3
Osh region	3273	5.2	455	1.6	398	4.1
Talas region	1923	3	671	2.3	216	2.2
Chui region	5742	9	2231	7.7	996	10.2
Bishkek	35651	56.1	18901	65.4	5959	60.8
Osh	5344	8.4	2439	8.4	846	8.6

Structure of Office Equipments by Economic Activities in 2006

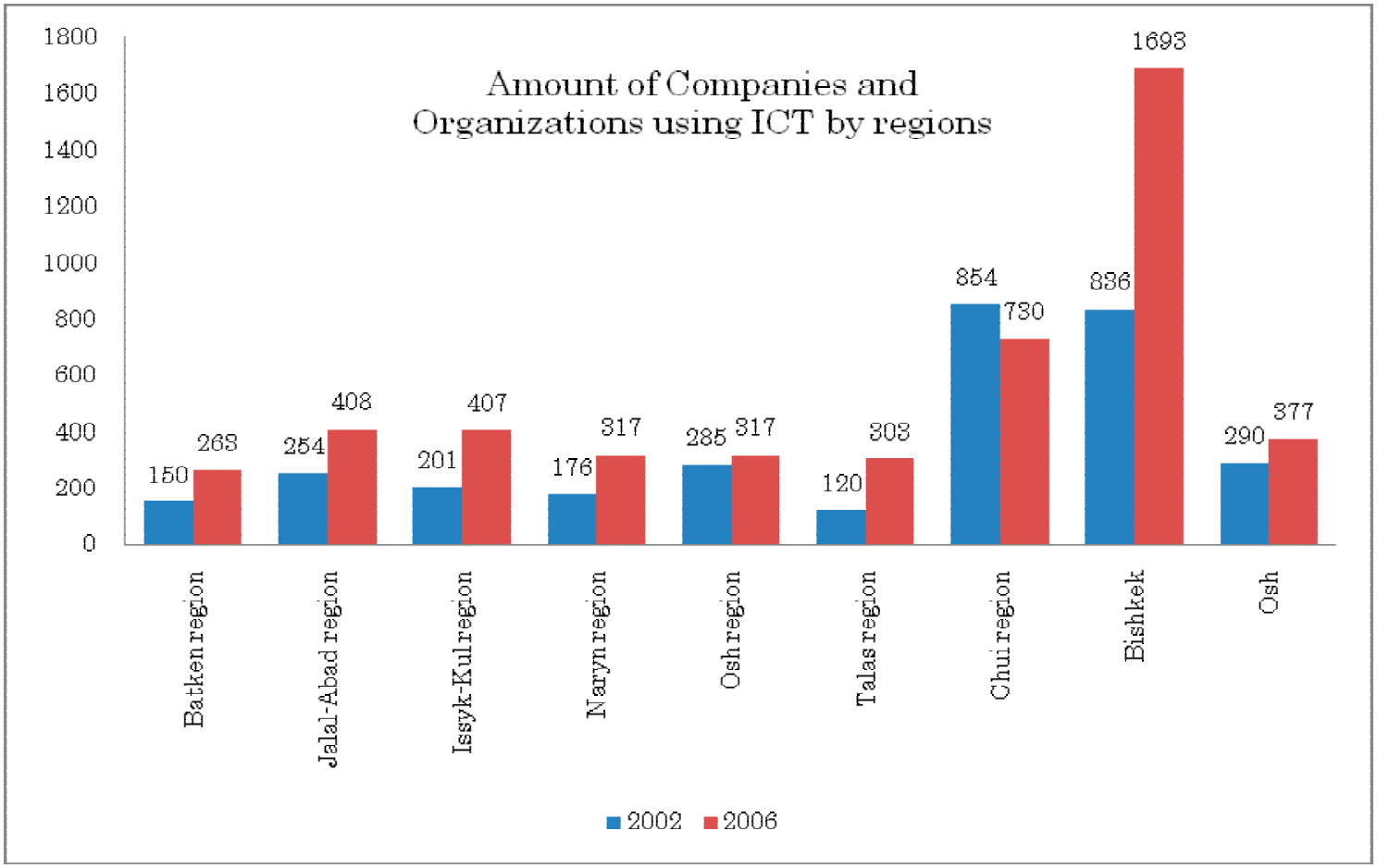
	Office equipments	Including		
		scaner	printer	copying machine
Amount, units	**31168**	**2677**	**22185**	**6306**
Percentage	**100**	**100**	**100**	**100**
agriculture, hunting, forestry, fishery	1.4	0.9	1.4	1.6
mining, processig industry	6.8	8.5	7.4	4
producing and supplying of electricity, natural gas and water	3.4	1.5	4	1.7
construction industry	1.6	1.9	1.6	1.7
trade; cars, domestic articles repair service; hotels; restaurants	2.8	3.4	2.9	2.4
trasport	3.7	3.3	4	2.7
communication	3.7	4.9	4.1	1.9
financial activity	9.4	6.2	10.5	7.1
real estate business	1	0.6	1.1	0.6
IT business activity	0.8	0.8	0.9	0.3
reseaching activity	1.2	2.2	1.2	0.9
other services	4.8	6.4	4.6	4.7
state administration	31	29.2	32.8	25.5
education	20	19.6	15.2	36.8
health service and social services	4.5	4	4.8	3.9
providing communal, social and personal services	3.4	6	3	3.8

Data about Computing Services

	Kyrgyz Republic	Including		
		cities	Bishkek	regions
Local network	2073	1860	1040	213
e-mail	22132	21310	18932	822
Internet access spots	7947	7757	6092	190
including ADSL	2087	2036	1421	51
Own Web sites	743	711	566	32
including On-Line services	128	125	105	3
Web sites in Kyrgyz	110	99	83	11
Amount of companies entered to State Computer Network	134	112	50	22

Structure of Computing Services by Economic Activities in 2006

	Local Network	E-mail	Internet access spots	ADSL	Own Web sites	Providing On-line services	Web sites in Kyrgyz language
Amount, units	**2073**	**22132**	**7947**	**2087**	**743**	**128**	**110**
Percentage	**100**	**100**	**100**	**100**	**100**	**100**	**100**
agriculture, hunting, forestry, fishery	0.5	0.1	0.2	0.2	0.1	-	-
mining, processig industry	6.5	6.4	5.2	5.1	11	6.3	4.5
producing and supplying of electricity, natural gas and water	6.6	0.5	0.4	0.1	0.4	-	-
construction industry	0.9	0.2	0.7	0.4	0.5	-	-
trade; cars, domestic articles repair services; hotels; restaurants	3.7	2.9	4.9	2.5	2.6	0.4	3.6
trasport	4	2.2	2.8	4	3.2	6.3	1.8
communication	6.7	9.5	15.3	11.4	6.1	13.3	-
financial activity	8.9	9.2	5.5	13.7	5.8	11.7	2.7
real estate business	0.7	0.1	0.6	0.4	0.8	-	-
IT business activity	2.6	0.7	2.4	4.5	2	0.8	-
reseaching activity	1	0.2	0.7	0.2	0.8	-	-
other services	5.4	2.3	3.7	3.8	4.6	4.7	1.8
state administration	15.5	10.5	12.9	11.2	16.8	23.4	48.2
education	31.5	51.9	36.8	37	24.5	15.6	26.4
health services and social services	2	0.6	1.2	0.4	2.2	4.7	3.6
providing communal, social and personal services	3.5	2.8	6.7	5.1	11.6	7	7.2


Amount of Companies and Organizations using ICT by regions
1800
1600
1400
1200
1000
800
600
400
200
0
150
263
254
408
201
407
176
317
285
317
120
303
854
730
836
1693
290
377
Batken region
Jalal-Abad region
Issyk-Kul region
Naryn region
Osh region
Talas region
Chui region
Bishkek
Osh
2002
2006