

**KYRGYZ REPUBLIC
MINISTRY OF HEALTH**

**PREPARATORY SURVEY
FOR
THE PROJECT FOR IMPROVEMENT
OF
MEDICAL EQUIPMENT
IN
BISHKEK CITY AND CHUI OBLAST
IN
KYRGYZ REPUBLIC**

MAY 2022

**JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)**

INTEM CONSULTING, INC.

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PREFACE

Japan International Cooperation Agency (JICA) decided to conduct the preparatory survey for the Project for Improvement of Medical Equipment in Bishkek City and Chui Oblast and entrust the survey to INTEM Consulting, Inc.

The survey team held a series of discussions with the officials concerned of the Government of Kyrgyz Republic from August 2021 to May 2022 and conducted field investigations. As a result of further studies in Japan, the present report was finalized.

I hope that this report will contribute to the promotion of the Project and to the enhancement of friendly relations between our two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of Kyrgyz Republic for their close cooperation extended to the survey team.

May, 2022

Jun Sakuma
Director General
Human Development Department
Japan International Cooperation Agency

SUMMARY

SUMMARY

① Overview of the Country

Kyrgyz Republic (hereinafter referred to as “Kyrgyzstan”) is a landlocked country with a population of approximately 6 million and an area of 198,500,000km². The capital city is Bishkek. The national language is Kyrgyz, but Russian is widely used as an official language. The average life expectancy is 71.54 years, and the literacy rate is almost 100%¹.

Since its independence in 1991, the implementation of health sector reforms in Kyrgyzstan led to a significant improvement in the fight against infectious diseases such as polio and malaria. However, in recent years, the number of Non-Communicable Diseases (hereinafter referred to as “NCDs”) accounts for approximately 80% of the mortality rate, including among the young generation, and measures to tackle NCDs have been urgent challenges. Furthermore, in the recent pandemic of COVID-19, having a NCD as an underlying disease is identified as a risk factor making the condition with COVID-19 severe. Thus, early detection and treatment of NCDs has become even more important. Considering this background, the government of Kyrgyzstan has set up a goal of reducing deaths of members of the young generations under 70 years old due to NCDs to one-third, and the government has been making efforts to improve health care system at medical facilities for early detection and treatment of NCDs.

② Background, History and Outline of the Project

The capital city, Bishkek and its surrounding area, Chui oblast are densely populated, and more than 30% of total population of Kyrgyzstan live there. In the area, there is a high concentration of patients who are transferred from other regions. Additionally, the number of deaths per 100,000 people in cardiovascular diseases, which is one of NCDs, was 408.7, and this was much higher than the national average of 317 in 2020. However, in Chui oblast: where 9 of 10 targeted hospitals are located, due to function failure caused by deterioration of medical equipment, district and regional hospitals that are technically considered as the secondary medical facilities are not able to perform medical services that should be provided at these hospitals for diagnosis and treatment of NCDs; therefore, the secondary hospitals have no choice other than to send the patients to tertiary hospitals. In addition to this situation, the geographical proximity of Bishkek city has also contributed to the tendency for residents who need medical services for NCDs to go directly to the tertiary hospitals in Bishkek city from the beginning, resulting in further concentration of patients at tertiary hospitals of the city.

Considering this background, the Project for Improvement of Medical Equipment in Bishkek City and Chui Oblast in Kyrgyz Republic (hereinafter referred to as “the Project”) aims to ensure sufficient medical services for NCDs at the targeted secondary hospitals which are the center of public medical

¹ World Bank, Data 2020 (Life expectancy at birth, total (years) - Kyrgyz Republic | Data (worldbank.org))

services in Bishkek city and Chui oblast (1 hospital in Bishkek and 9 hospitals in Chui) through provision of medical equipment that are necessary for diagnosis and treatment of NCDs. Hence, the Project is positioned as a high-priority project essential to the realization of the health care system improvement of Kyrgyzstan, which is one of the aims of the government of Kyrgyzstan in the long-term national strategy and sector strategies.

③ Outline of the Survey Results and Description of the Project

For a Preparatory Survey of the Project, the survey team was dispatched to Kyrgyzstan from 25th September to 24th October in 2021 and had discussions with the Government officials of Kyrgyzstan, and the team conducted field survey in the targeted areas. After the review and analysis in Japan, the team visited Kyrgyzstan for the explanatory mission of the Preparatory Survey report from 5th March to 20th March in 2022. After that, the Preparatory Survey report was compiled.

The outline of the Project is as follows.

< Targeted Area >

The Project procures medical equipment that are necessary for diagnosis and treatment of NCDs at the following 10 secondary hospitals that are the center of public medical services in Bishkek city and Chui oblast: Jaiyl District General Practice Center, Panfilov District General Practice Center, Moscow District General Practice Center, Sokuluk District General Practice Center, Chui Regional Merged Hospital, Issyk-Ata District General Practice Center, Chui District General Practice Center, Tokmok Town General Practice Center, Kemin District General Practice Center, Ivanovka Village’s Branch of Issyk-Ata General Practice Center.

< Equipment >

The equipment procured under this Project is outlined below.

Table 1-1 Outline of the Project

Main Department and Equipment
Target Department: Diagnostic Imaging Department, Surgery Department, Clinical Laboratory Department, Central Sterilization Room, Outpatient Department
Equipment: General X-ray machine, Mobile X-ray machine, Ultrasound, Mobile Ultrasound, ECG, Biochemical analyzer, Hematology analyzer, Ventilator, Patient monitor, Operation lamp, Autoclave, etc.

< Maintenance Service of the Equipment >

In the Project, in order to secure appropriate operation and maintenance of the equipment procured by the Project, maintenance services shall cover the periodic inspection and on-call service with spare parts for 2 additional years after a 1-year manufacturer warranty period for the equipment that is

expensive, lifesaving or sensitive, etc. With the purpose of improving the equipment maintenance ability of the hospitals, the periodical inspection shall be performed by local distributors every 3 months, and instruction on inspection items and techniques for daily inspection shall be provided when the local engineer visits. The maintenance contract will also cover spare parts and repair parts whereas the users of the equipment will be responsible for all consumables such as reagents and disposable parts.

④ Project Schedule and Cost Estimation

It is assumed that it will take about 2 months from the conclusion of the E/N and G/A to ratify them in Kyrgyzstan. The implementation schedule of the Project will be about 4 months for detailed design after the contract with the Consultants is made, about 2 months for the bid and supplier contract and about 14 months for the procurement and installation of the equipment.

The total amount to be borne by Kyrgyzstan for the Project is estimated as 0.03 million yen. The exchange rate: 1US\$=111.10JPY (as of October, 2021)

⑤ Project Evaluation

<Relevance>

(1) Beneficiaries of the project

The targeted areas of the Project are Bishkek city and Chui oblast. The population was approximately 1,074,000 in the capital city, Bishkek and 975,000 in Chui oblast at the beginning of 2021, and when added together, the beneficiaries in both regions account for one third of the total Kyrgyz population. In Chui oblast where 9 of the 10 targeted hospitals are located, the number of deaths per 100,000 people due to one of the indicators of NCDs: cardiovascular disease, was 408.7 in 2020, which was much higher than the national average of 317 in the same year. Hence, the potential contribution of the Project is considered significantly high.

(2) From the viewpoint of improvement in geographical access to medical service

The Project procures the necessary medical equipment for secondary medical facilities, and it enables the targeted secondary hospitals to perform medical services that are essential as a secondary hospital. As a result, the patients who had to be previously transferred to tertiary hospitals in Bishkek city can receive examination and treatment at their neighboring secondary hospitals at an early stage. Thus, it is expected that physical burden of patients and the financial burdens of their families will be reduced by improving the access of medical services.

(3) Consistency with Kyrgyzstan's development plans

The Kyrgyz government has set a goal of reducing deaths among the young generation under 70 years old due to NCDs to one-third in a health sector goal of the national long-term strategy, “National Development Strategy 2018-2040”, as well as in the sector-specific strategy “The National Public Health

Protection and Health System Development Programme”, and the government has promoted improvement of the health care system for early detection and treatment of diseases at secondary hospitals.

Through procurement of medical equipment for diagnosis and treatment of NCDs at the medical facilities which are the centers of public medical services in Bishkek city and Chui oblast, the Project aims to improve the quality of medical services, through strengthening diagnosis and treatment systems at each hospital. Thus, the Project matches the policy of the Kyrgyzstan Government.

(4) Consistency with Japan's Aid Policy

In the priority area, the plan, “Rebuilding of Social infrastructure” of “Country Development Cooperation Policy for the Kyrgyz Republic (February 2012)”, is positioned as aiming to improve the living standard of the people through support for the health care sector. Also, in the “Country Analysis Paper for the Kyrgyz Republic (March 2020)”, the social sector strengthening program is highlighted as a priority issue, and the results of analysis show that improvement of deteriorated health care infrastructure (facilities and equipment) and strengthening of maintenance ability are important. Hence, the Project matches these policy and analysis.

<Effectiveness>

Expected project outputs are as follows.

(1) Quantitative Effects

Table 3-1 Output indicators of the Project

Outcome	Base value (Actual value in 2020)	Target value (by 2027) 【3 years after the project completion】
The number of inpatients and outpatients (per year)	77,137 people	92,000 people
The number of general X-ray examinations (per year)	77,089 cases	85,000 cases
The number of gastrofiberscope examinations (per year)	1,680 cases	4,560 cases

(2) Qualitative effects

- 1) Increase of patient satisfaction
- 2) Improvement of medical services in the targeted hospitals

In conclusion, as described above, the relevance of the Project as well as its effectiveness are expected to be high.

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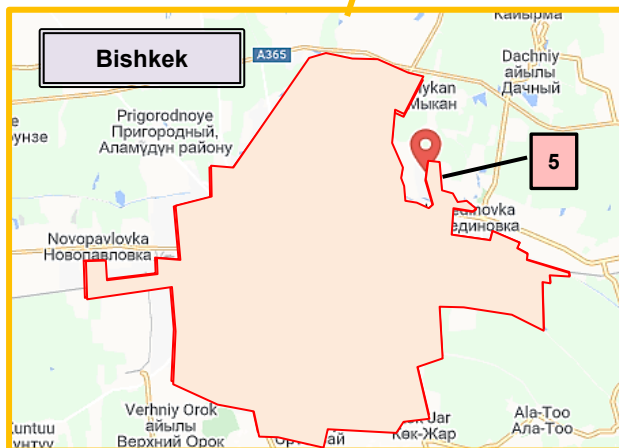
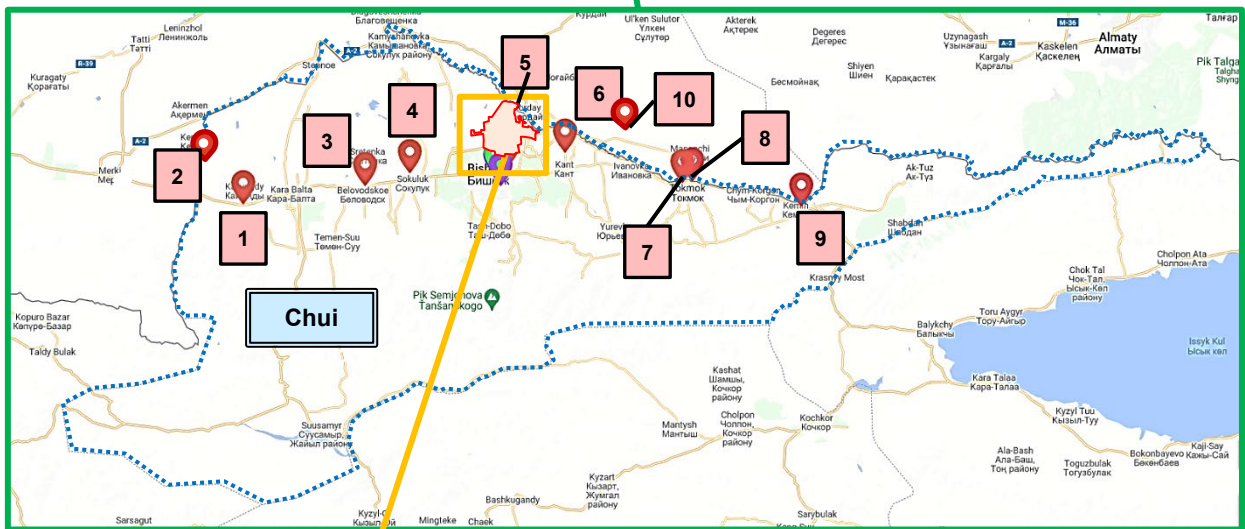
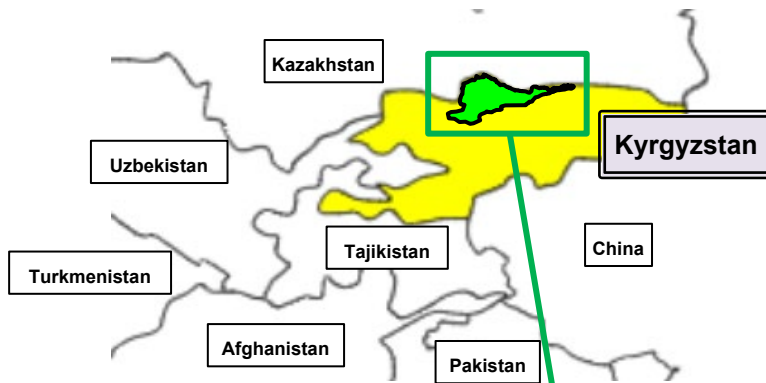
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- 2. Survey Schedule
- 3. List of Parties Concerned in the Recipient Country
- 4. Minutes of Discussions
- 5. Planned Equipment List of Each Hospital
- 6. Evaluation Chart of Requested Equipment

MAP



No.	Hospital Name	
1	Jaiyl District General Practice Center	Secondary hospital
2	Panfilov District General Practice Center	
3	Moscow District General Practice Center	
4	Sokuluk District General Practice Center	
5	Chui Regional Merged Hospital	
6	Issyk-Ata District General Practice Center	
7	Chui District General Practice Center	
8	Tokmok Town General Practice Center	
9	Kemin District General Practice Center	
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ABBREVIATIONS

Abbreviations	English
A/P	Authorization to Pay
AVR	Automatic Voltage Regulator
B/A	Banking Arrangement
CT	Computed Tomography
CR	Computed Radiography
DAC	Development Assistance Committee
DICOM	Digital Imaging and Communications in Medicine
EAEU	Eurasian Economic Union
ECG	Electrocardiogram
E/N	Exchange of Notes
G/A	Grant Agreement
ICU	Intensive Care Unit
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
JICA	Japan International Cooperation Agency
JIS	Japanese Industrial Standards
MOFA	Ministry of Foreign affairs
MOH	Ministry of Health
NCDs	Non-Communicable Diseases
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PACS	Picture Archiving and Communication Systems
PMR	Project Monitoring Report
UPS	Uninterruptible Power Supply
VAT	Value Added Tax
WHO	World Health Organization

CHAPTER 1 BACKGROUND OF THE PROJECT

CHAPTER 1 Background of the Project

1-1 Background, History and Outline of the Requested Japanese Grant Aid Project

In Kyrgyz Republic (hereinafter referred to as “Kyrgyzstan”), since independence in 1991, political instability and economic recession have resulted in the outflow of medical personnel from the country. Consequently, the provision system of health care services has become fragile, and the quantity and quality of health care services declined. Responding to these situations, Kyrgyzstan implemented the health sector reforms, and they resulted in the achievement of Millennium Development Goal 4 (reduction of infant mortality) and contributed to the fight against infectious diseases, such as the eradication of polio and malaria. However, recently, Non-Communicable Diseases (hereafter referred to as “NCDs”) have become a serious issue, including among young people, and the mortality from NCDs accounts for approximately 80% of deaths in Kyrgyzstan. Socioeconomic losses associated with the provision of health care services for NCDs and death and disability due to NCDs are estimated to be 3.9% of the country's gross domestic product². Most of the diagnostic and treatment services for NCDs are provided at national, regional and district hospitals, which are the centers of medical services in each region. However, in those hospitals, many superannuated medical equipment are used, and necessary medical equipment for early detection and diagnosis for NCDs is not sufficiently equipped; therefore, providing timely and appropriate medical services is quite challenging for the hospitals.

Especially in the capital city, Bishkek and its surrounding area, Chui oblast, where more than 30% of the national population live in total, the hospitals have high patient concentrations, including those transported from other regions. In addition, the number of deaths per 100,000 people from cardiovascular diseases, which is one indicator of NCDs, was 408.7 in 2020, and it was much higher than the country average of 317³. Hence, improvement in the quality of medical services is highlighted as an urgent issue in these areas.

In Chui oblast, the district and regional hospitals which are technically considered as secondary hospitals should be able to deliver diagnostic and treatment services for NCDs, but they are not able to provide sufficient medical services because of the function failure due to superannuated medical equipment. Hence, the patients have been transferred to tertiary hospitals, skipping the secondary hospitals. In addition to this situation, the geographical proximity of Chui oblast to Bishkek city has also contributed to the tendency for residents who need medical services for NCDs to go directly to the tertiary hospitals in Bishkek city from the beginning, resulting in further concentration of patients at tertiary hospitals in the city.

In order to tackle those issues, the government of Kyrgyzstan established goals of the health sector

² The Program of the Kyrgyz Republic Government on Public Health Protection and Health Care System Development for 2019-2030, “Healthy Person – Prosperous Country”

³ National Statistical Committee of the Kyrgyz Republic (National Statistical Committee of the Kyrgyz Republic)

in the long-term national strategy, “National Development Strategy for 2018-2040”, and a sector-specific strategy, “the National Public Health Protection and Health System Development Program (2019-2030). In the strategies, reducing deaths among young people under age 70 due to NCDs to one-third was set as a goal, and the government has been working on improvement of the health care system for early detection and treatment of diseases at the secondary medical facilities.

In Kyrgyzstan, the cumulative number of people infected with COVID-19 reached approximately 190,000, and people who died with COVID-19 was approximately 2,800 as of January 2022⁴. NCDs are known as risk factors, and the patients who have a NCD as their underlying disease are more likely to experience aggravation of their conditions with COVID-19. Hence, early detection and treatment of NCDs have become even more important.

Considering this background, the Project for Improvement of Medical Equipment in Bishkek City and Chui Oblast in the Kyrgyz Republic (hereinafter referred to as “the Project”) aims to ensure sufficient medical services for NCDs at the targeted secondary hospitals which are the centers of public medical services in Bishkek city and Chui oblast (1 hospital in Bishkek and 9 hospitals in Chui) through provision of medical equipment that are necessary for diagnosis and treatment of NCDs. Hence, the Project is considered as a high-priority project essential to realization of improvement in the health care system, which the government of Kyrgyzstan addresses in the long-term national strategy and sectoral strategy.

⁴ WHO, Kyrgyzstan: COVID-19 Dashboard with vaccination data (<https://covid19.who.int/region/euro/country/kg>)

1-2 Natural Conditions

Bishkek city has a Mediterranean climate with average daytime temperatures of -3°C in winter (November to February) and 31°C in summer (June to August). In winter, the climate is very cold, with the lowest temperatures down to -20°C and occasional heavy snowfalls. In summer, the temperature rises to 40 degrees Celsius, and the air is dry due to very little precipitation.

Table 1-1 Climate of Bishkek city

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Maximum Temperature	2.9°C	5.1°C	12.1°C	18.7°C	24.1°C	29.5°C	32.4°C	31.4°C	31.4°C	18.5°C	10.3°C	4.6°C
Average Minimum Temperature	-7.1°C	-4.9°C	1.0°C	6.9°C	11.2°C	16.1°C	18.4°C	16.9°C	11.7°C	5.6°C	-0.5°C	-5.2°C
Average Rainfall	28 mm	37 mm	51 mm	75 mm	60 mm	34 mm	19 mm	15 mm	19 mm	37 mm	44 mm	37 mm
Average Humidity	75 %	75%	71 %	63 %	60 %	50%	46 %	45 %	48 %	62%	70 %	75 %

1-3 Environmental and Social Considerations

There are no anticipated environmental and social impacts with procurement of medical equipment by the Japan side or with removing of existing equipment, renovation and facility work by the Kyrgyzstan side. Hence, the Project is categorized as Category C (a project likely to have minimal or no adverse environmental impacts) according to the “JICA Guidelines for Environmental and Social Considerations” (April 2010).

CHAPTER 2 CONTENTS OF THE PROJECT

CHAPTER 2 Contents of the Project

2-1 Basic Concept of the Project

2-1-1 Outline of the Project

< Equipment >

The Project procures medical equipment for diagnosis and treatment of NCDs at the hospitals which are the centers of public medical services in Bishkek city and Chui oblast (regional and district hospitals), thus strengthening the diagnosis and treatment system of each hospital, by which the Project contributes to improvement in the quality of health care services. The equipment plan is made, following these assumptions.

In Kyrgyzstan, there is a future plan to install Picture Archiving and Communication Systems (hereinafter referred to as “PACS”). Though PACS is not included in the Project, the diagnostic imaging equipment procured by the Project shall be considered to have specifications that enable digital images (adoption of DICOM standard), assuming that PACS will be introduced by e-health center in the future. Thus, the Project is designed to encourage PACS operation for the future.

The equipment procured under this Project is outlined below.

Table 2-1 Outline of the Project

Main Department and Equipment
Target Department: Diagnostic Imaging Department, Surgery Department, Clinical Laboratory Department, Central Sterilization Room, Outpatient Department
Equipment: General X-ray machine, Mobile X-ray machine, Ultrasound, Mobile Ultrasound, ECG, Biochemical analyzer, Hematology analyzer, Ventilator, Patient monitor, Operation lamp, Autoclave, etc.

< Maintenance Service of the Equipment >

In the Project, maintenance services for the equipment that requires long-term maintenance will cover the periodic inspection and on-call service for 2 additional years by local distributor engineers after a 1-year manufacturer warranty period. At the hospital visit of the local distributor engineers for the periodic inspection, equipment maintenance engineers of the hospitals and end-users of the equipment such as doctors, nurses and laboratory technicians will receive instruction on daily inspection and the inspection items and practical inspection trainings. This maintenance services include repair parts and spare parts, but consumables such as reagents and disposable parts should covered by the user side.

2-2. Outline Design of the Japanese Assistance

2-2-1 Design Policy

(1) Basic Principles

The Project aims to strengthen the diagnostic and treatment systems at medical facilities in Bishkek city and Chui oblast (regional and district hospitals) which are the centers of public medical service provision by medical equipment procurement for diagnosis and treatment of NCDs, thereby contributing to the improvement in the quality of health care services. Hence, the equipment plan will also follow these assumptions.

(2) Policy on Natural Conditions

Bishkek city has a Mediterranean climate, with an average daytime temperature of -3°C in winter (November to February) and 31°C in summer (June to August). In winter, the climate is very cold, with the lowest temperatures down to -20°C and occasional heavy snowfalls. In summer, the temperature rises to 40 degrees Celsius, and the air is dry due to very little precipitation. Since the equipment to be installed in the Project will be used mainly indoors, the operating environment (temperature and humidity) will not affect the equipment.

(3) Policy on Social and Economic Conditions

Electricity in Kyrgyzstan is supplied by three-phase 380 V and single-phase 220 V. Electricity is preferentially distributed to public facilities including hospitals, and the individual hospitals do not experience power outages except for one to two outages per year due to problems with power plants and transmission lines (power outages seem to occur several times a year, including planned outages in urban areas). In addition, all the target hospitals have generators to supply power to operating rooms, ICUs and laboratories in case of power outages.

The target hospitals take measures regarding voltage fluctuations, equipping AVR and UPS for important equipment. In the Project also, AVR and UPS are planned in order to avoid interruption of medical activities because of power failure and equipment failure due to voltage fluctuations as much as possible.

(4) Policy on Procurement Conditions

Regarding manufacturers, conditions that can provide after-sales services by local distributors in Kyrgyzstan or its surrounding countries will be applied. In the case that allows third-country products, it should be possible to procure the products in the Kyrgyzstan market. Also, the system for after-sales service by the local distributor is considered important, and the products shall not be selected only because of the prices. In addition, the headquarters of the product manufacturers should be located in

DAC countries and/or OECD countries. These restrictions shall be set to secure the quality of the equipment.

(5) Policy on Utilization of Local Agent

The site survey confirmed that there are local distributors of the targeted equipment manufacture in Bishkek city, and the distributors have engineers whose skills concerning equipment operation and installation are sufficient. The distributors can also supply spare parts and after-sales services, therefore, it is considered that they can provide services for the equipment procured in this Project. Therefore, local distributors will be involved in after-services and procurement of repair and spare parts of the equipment after handing-over.

On the other hand, some of the local distributors in Kyrgyzstan provide after-sales services in cooperation with distributors in neighboring countries such as Kazakhstan and Uzbekistan, depending on the equipment. Therefore, the distributors which provide after-sales services from neighboring countries such as Kazakhstan, Uzbekistan and Turkey will be allowed in the Project, thus not limiting participants to local distributors in Bishkek city.

(6) Policy on Operation and Maintenance Capacity

The equipment procured in the Project will be new models, and therefore there are no end-users who are familiar with operation of the equipment. Considering this situation, initial operation training and operational guidance on the equipment will be provided at the time of handing-over to equipment maintenance engineers of the targeted hospitals and the end-users such as doctors and nurses. In addition, for expensive, lifesaving and sensitive equipment that requires after-sales services, maintenance services by local agents shall be planned by the Project for additional 2 years after a 1-year manufacturer warranty period to secure appropriate operation and maintenance of the equipment. The 2 years maintenance service by the Project will provide periodic inspection every 3 months, and also provide instructions on the daily inspection items and its practical trainings at the engineer visits to improve the equipment maintenance ability of the hospitals. The Kyrgyzstan side agreed to allocate equipment maintenance engineers in each targeted hospital according to the regulation of MOH. In the case that the personnel are allocated, the maintenance trainings by the local distributors will be mainly given to the equipment maintenance engineers.

(7) Policy on Grade Setting for Equipment

The grade of the equipment will be set based on the medical service levels required for the targeted hospitals and the situations of existing equipment use, etc. In addition, in order for the equipment to be used appropriately and sustainably, the maintenance system and skill level of local agents as well as the procurement channel of spare parts and consumables will be carefully examined.

In Kyrgyzstan, it is planned to install PACS in the future. Though PACS is not included in the Project, the diagnostic imaging equipment procured by the Project shall be considered to have specifications that enable digital images (adoption of DICOM standard), assuming that PACS will be introduced by the e-health center in the future. Thus, the Project is designed to encourage PACS operation for the future.

(8) Policy on Procurement Method and Schedule

Regarding equipment procurement, it is important to select the equipment which can secure the required quality and accuracy, and installation and adjustment will be done by experts who have knowledge and skills for each type of equipment. Also, for implementation of the Project, procurement will be done by a Supplier with rich experience in medical equipment procurement of Japanese grant aid projects. In addition, it is necessary to secure the space for equipment installation and to conduct pre-installation work, and the schedule needs to be carefully made according to the progress of the preparatory work and pre-installation work by the Kyrgyzstan side.

(9) Policy on Gender

During the site survey, the targeted hospitals were interviewed regarding the existence of gender disparities in the health sector, and all the hospitals confirmed that there are no inequalities in health care access as the spirit of gender equality has been embedded since the independence of Kyrgyzstan. In addition to the interview results, the tendency which shows gender inequalities such as unnaturally low hospital visits by females was not found in the statistics on the number of new cases of representative NCDs by gender. The equipment plan of this Project was made applicable for diagnosis and treatment services for all the residents, including women.

Table 2-2 Number of new cases of NCDs by gender (diagnosis confirmed cases)

	2017		2018		2019		2020	
	Female	Male	Female	Male	Female	Male	Female	Male
Number of new diagnoses								
Infectious disease/ Parasites	46,900	41,520	45,400	44,191	48,609	44,951	44,924	45,685
Neoplasms	6,899	3,304	7,002	3,354	6,691	3,282	4,393	2,343
Hematology and Immunology diseases	41,388	23,134	35,520	20,469	31,212	19,366	18,216	10,552
Endocrine and Metabolic disorders	17,393	10,609	17,233	8,749	16,241	7,679	12,195	6,739
Mental disorders	5,770	6,209	5,542	5,352	5,414	4,682	3,540	3,029
Neurological disorders	26,944	17,951	28,246	18,292	26,111	18,403	16,936	12,090
Ophthalmologic disorder	50,331	33,249	53,290	36,626	53,468	35,855	30,381	20,293
Eye disorders	31,577	25,396	30,359	24,497	32,148	25,910	18,718	15,066
Cardiovascular diseases	36,216	22,661	32,701	20,864	34,661	22,078	24,719	16,494
Respiratory diseases	302,13	271,95	314,77	279,02	280,07	251,86	211,96	194,47
Digestive diseases	72,871	60,087	72,644	55,223	97,079	91,222	69,520	56,971
Skin diseases	43,364	35,971	42,706	36,500	41,462	36,224	25,255	21,171
Musculoskeletal disorders	35,650	19,818	36,725	19,626	35,956	19,044	24,544	13,207
Urogenital disorders	96,010	25,499	90,132	22,438	83,323	20,763	61,905	13,814
Disorders related to pregnancy, childbirth, and postpartum	69,571	-	66,301	-	50,540	-	33,245	-
Total	932,18	657,83	927,79	656,84	892,01	661,41	632,70	472,07

Source: National Statistical Committee of the Kyrgyz Republic

2-2-2 Basic Plan (Equipment Plan)

(1) Overall Plan

The equipment planned in the Project is essential medical equipment for diagnosis and treatment of NCDs for the medical facilities which are the centers of public medical service provision in Bishkek city and Chui oblast (regional and district hospitals).

(2) Equipment Plan

1) Examination of Requested Equipment

Considering the selection criteria in the table below, the final requested equipment list was carefully discussed and considered along with the target hospital directors, deputy directors and doctors who are end-users of equipment, and agreement was obtained from MOH. Also, deterioration levels and situations of existing equipment use were extensively studied during the site survey, and the equipment whose needs were confirmed to be high in all targeted hospitals are listed in the final equipment list. During the analysis in Japan, the validity of the equipment procured under this Project was verified by taking account into the various information obtained through the site survey, and it was reflected in the equipment plan.

Table 2-3 Evaluation Criteria of Equipment Selection

Evaluation Criteria of Equipment Selection
① Equipment is compatible with the currently envisioned medical activities of the hospital
② Equipment that is expected to have eligible patients who need the equipment for their treatment
③ Equipment for which operation and maintenance are technically feasible
④ Equipment that does not require excessive budgetary burden for operation
⑤ Equipment for which spare parts and consumables are easily accessible in the local market
⑥ Rooms and spaces are prepared for equipment installation
⑦ Equipment that accords with the current existing equipment (future procurement plan should be confirmed, and duplication should be avoided)

Evaluation was performed on a scale of one to five for the above selection criteria.

< Equipment >

- 5: No problem at all
- 4: Mostly no problem
- 3: Some concerns, but relevant
- 2: Too many concerns identified
- 1: Not relevant at all

The results of the evaluation of all requested equipment are shown in “Attachment 6: Equipment Review Table”.

2) Examination of Equipment Quantity

For the planned equipment selected based on the above criteria, the quantity of each type of equipment was drafted with consideration concerning the frequency of use, future medical activities, and the size of main rooms, etc.

3) Planned Equipment

The list shows planned equipment which is decided based on the result of the discussions explained earlier. The details of each targeted hospital is shown in “Attachment 6: Evaluation Chart of Requested Equipment”.

Table 2-4 Planned equipment list

No.	Request No.	Equipment Name	Quantity	Purpose of Use	Main Specifications
1	Req-1	General X-ray machine	8	A device for taking diagnostic images using X-ray	- Floor mounted type - Patient tables for the supine and standing position, etc.
2	Req-2	Mobile X-ray machine	9	A device for taking diagnostic images using X-ray	- DR - FPD
3	Req-3	Ultrasound	13	A device for ultrasound diagnostic	- Station type - Each type of probes
4	Req-4	Mobile ultrasound	6	A device for ultrasound diagnostic	- Mobile type - Each type of probes
5	Req-5	ECG	6	A device for measuring ECG	- 12-leads, 3ch • 6ch • 12ch
6	Req-6	Ventilator	21	A device for patient with difficulty in spontaneous breathing	- Breathing mode: VC, PC, SIMV, CPAP, etc. - Masks for adults, pediatrics and newborns
7	Req-7	Operation lamp	14	A device for lighting during surgical operation	- Ceiling type - LED
8	Req-8	Operation table	13	For operation use	- Manual type - Mattresses for each part
9	Req-9	Mobile suction pump	8	A device for sputum suction	- Floor-standing mobile type
10	Req-10	Patient monitor	29	A device for patient monitoring	- ECG, respiratory rate, SpO2, body temperature, heart rate, plus, blood pressure, etc.
11	Req-13	Autoclave (Small)	17	A device for sterilizing instruments	- Vertical type
12	Req-14	Biochemistry analyzer	6	A device for measuring sugar, proteins, etc. from blood and urine samples	- PC or built-in PC for analysis
13	Req-15	Centrifuge	6	A device for centrifugal separation process of samples	- Desktop type
14	Req-16	Hematology analyzer	5	A device for blood cell count and examination	- Measurement items: white blood cell count, red blood cell count, platelets, etc.
15	Req-17	CR and image writer	9	A device for taking X-ray diagnostic images using imaging plates instead of X-ray film	- Scanners, dry imagers, cassettes, etc.
16	Req-18	Surgical instruments set (Major)	5	For surgical use	- Paean forceps, mosquito forceps, wound openers, etc.
17	Req-20	Gastrofiberscope	6	A device for examination of the inside of the stomach	- Fiber scopes, video processors, monitors, light sources, etc.
18	Req-21	Colonofiberscope	2	A device for examination of the inside of the large intestine	- Fiber scopes, video processors, monitors, light sources, etc.

19	Req-22	Bronchofiberscope	2	A device for examination of the inside the bronchi	- Fiber scopes, video processors, monitors, light sources, etc.
20	Req-23	Electrical coagulator	14	A device for excision, incision, and coagulation of affected tissue	- Bipolar, monopolar

4) Maintenance Contracts after Expiration of the Warranty Period

In order to prevent the situation that the equipment is left unattended due to equipment failure relatively early after delivery, maintenance service for 3 years in total after delivery of the equipment is included under this Project. The maintenance services of this Project shall ensure the periodic inspection and on-call service for 2 additional years in addition to the 1-year guarantee period for equipment. During these periods, the repair parts and replacement parts will be included in this service without any charges, but all consumables such as reagents and disposables should be covered by the user side.

The criteria for selecting equipment for maintenance service contracts are;

- 1) Equipment whose failure is expected to exert a major impact on medical services in the hospitals,
- 2) Equipment that can only be repaired by the technicians of local agents.

The contents of maintenance service per year are summarized as follows.

Table 2-5 Target Equipment for Maintenance Service Contract

No.	Equipment Name	Q'ty		Regular Service (times/year) for 2 years	On-call Service (times) for 2 years
1	General X-ray machine	8	unit	4	Unlimited
2	Mobile X-ray machine	9	unit	4	Unlimited
3	Ultrasound	13	unit	4	Unlimited
4	Mobile ultrasound	6	unit	4	Unlimited
5	EKG	6	unit	4	Unlimited
6	Ventilator	21	unit	4	Unlimited
10	Patient monitor	29	unit	4	Unlimited
13	Autoclave (Small)	17	unit	4	Unlimited
14	Biochemistry analyzer	6	unit	4	Unlimited
16	Hematology analyzer	5	unit	4	Unlimited
17	CR and image writer	9	unit	4	Unlimited
20	Gastrofiberscope	6	unit	4	Unlimited
21	Colonofiberscope	2	unit	4	Unlimited
22	Bronchofiberscope	2	unit	4	Unlimited
23	Electrical coagulator	14	unit	4	Unlimited

2-2-3 Outline Design Drawing

Layout plan of the main equipment for installation is as follows.

【Jaiyl District General Practice Center】

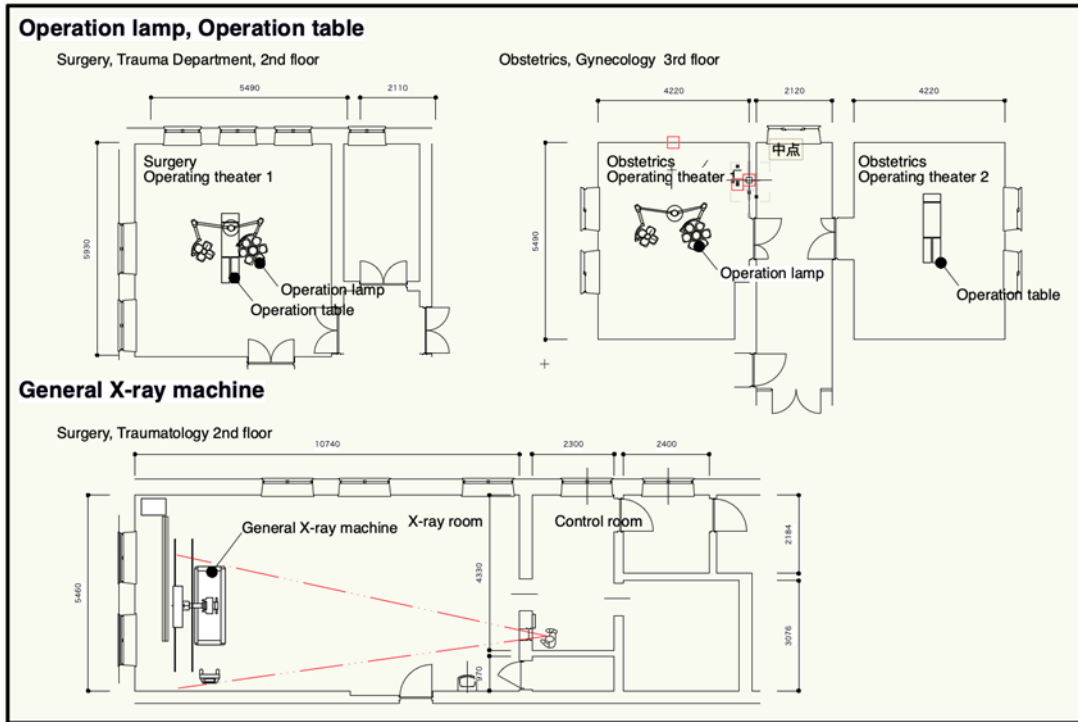


Figure 2-1 Jaiyl District General Practice Center layout plan

【Panfilov District General Practice Center】

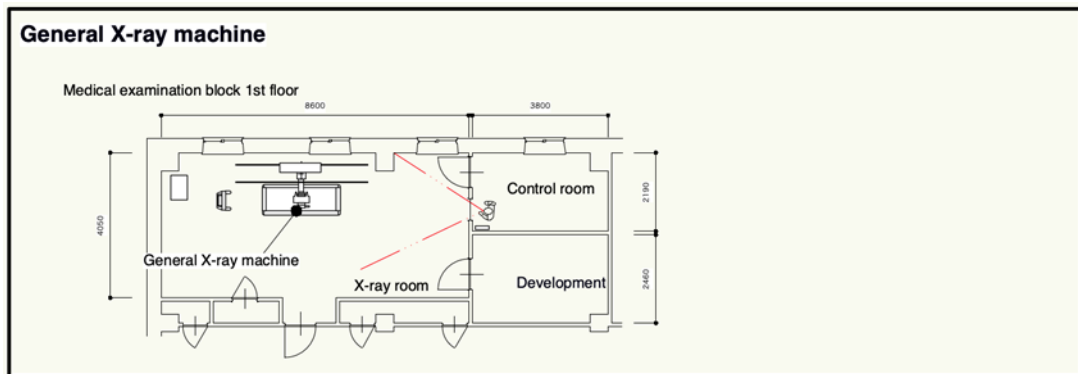


Figure 2-2 Panfilov District General Practice Center layout plan

【Moscow District General Practice Center】

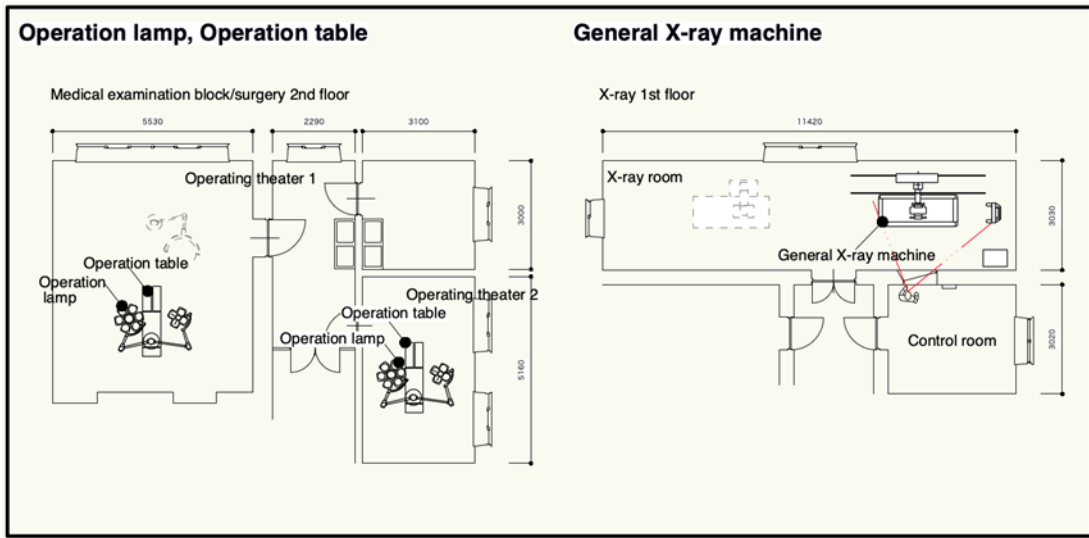


Figure 2-3 Moscow District General Practice Center layout plan

【Sokuluk District General Practice Center】

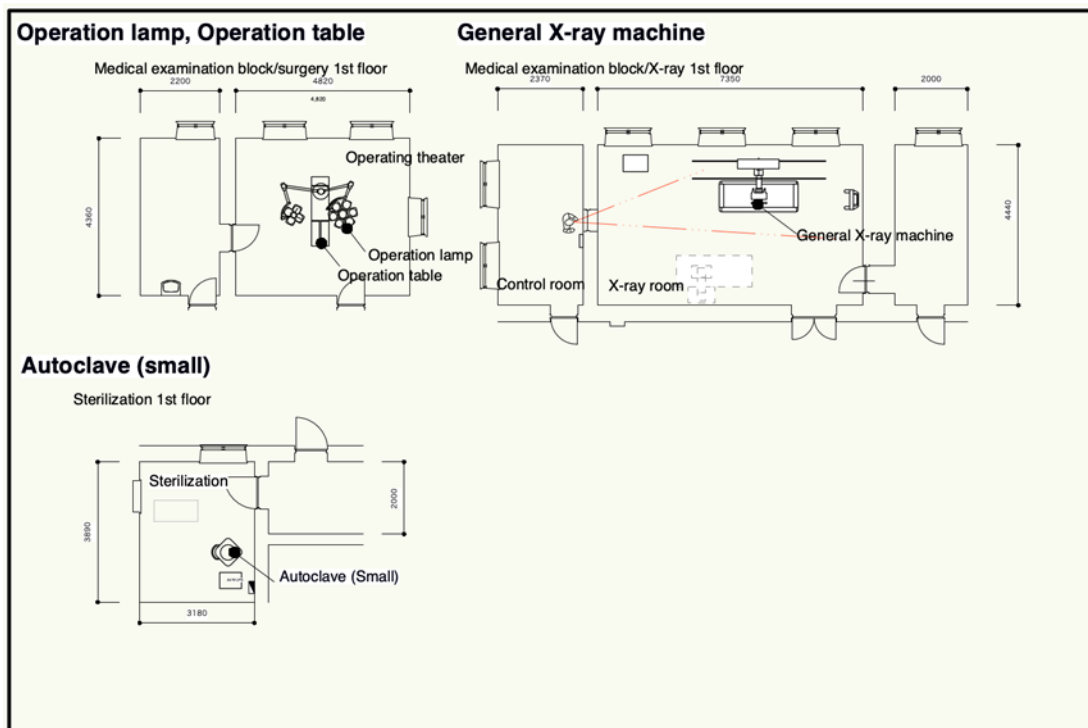


Figure 2-4 Sokuluk District General Practice Center layout plan

【Chui Regional Merged Hospital】

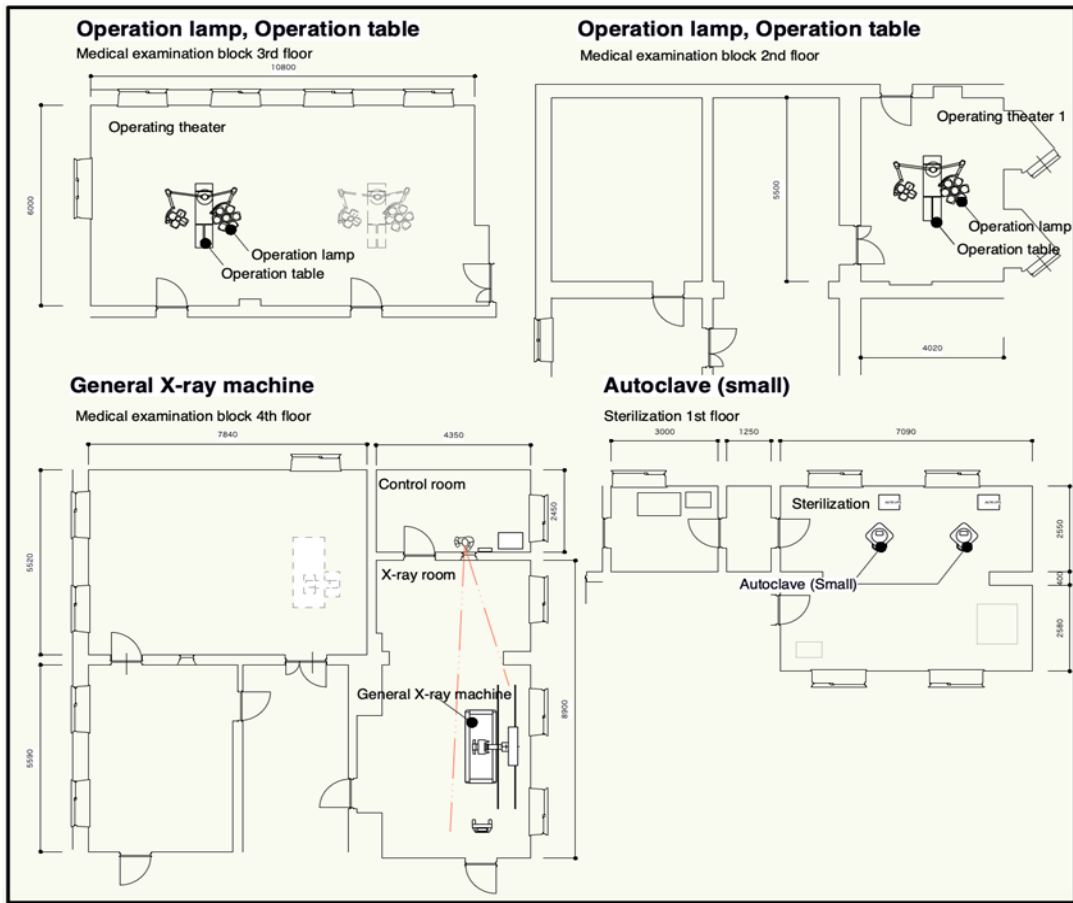


Figure 2-5 Chui Regional Merged Hospital layout plan

【Issyk-Ata District General Practice Center】

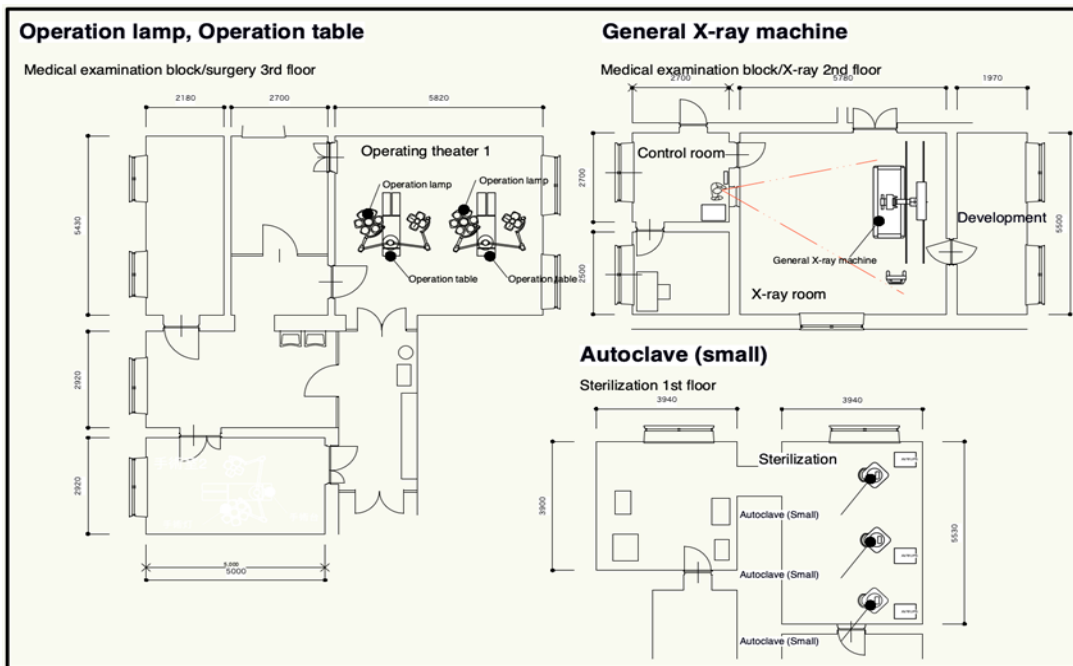


Figure 2-6 Issyk-Ata District General Practice Center layout plan

【Chui District General Practice Center】

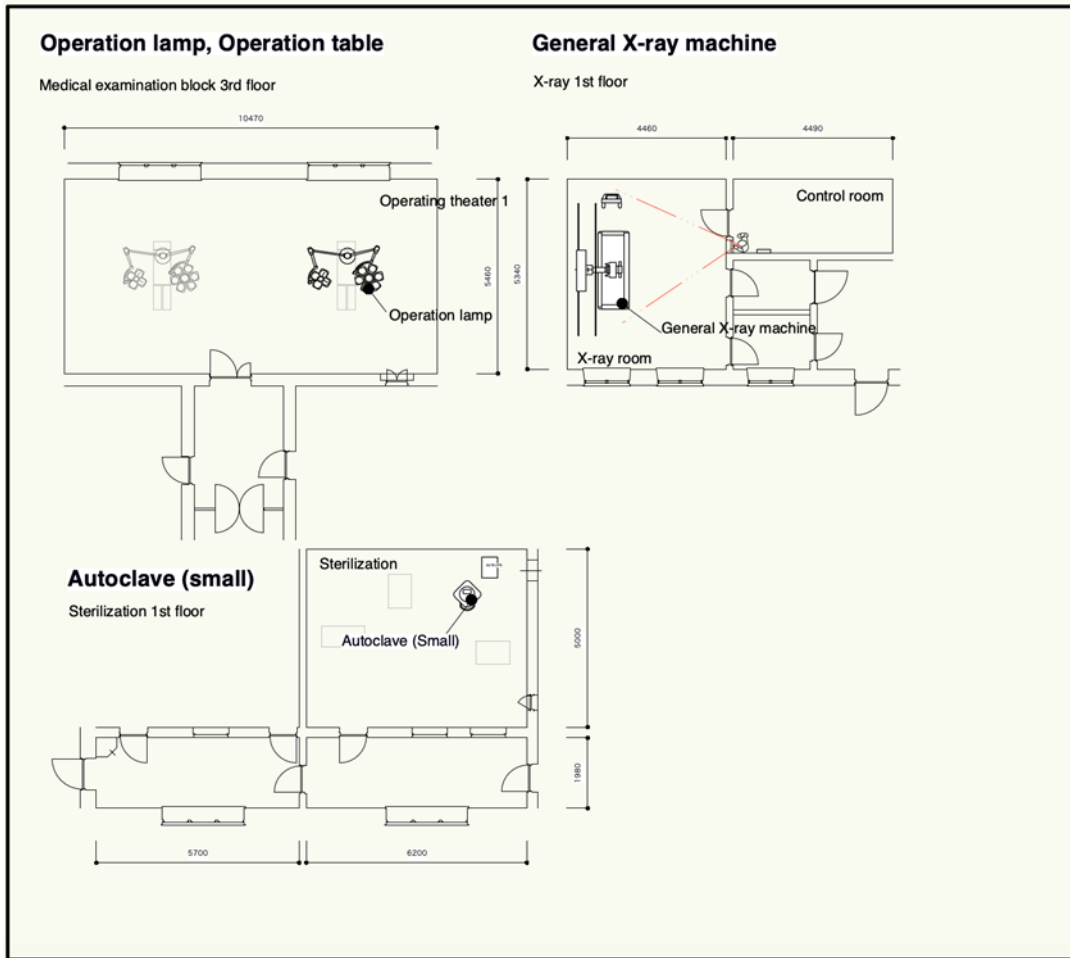


Figure 2-7 Chui District General Practice Center layout plan

【Tokmok Town General Practice Center】

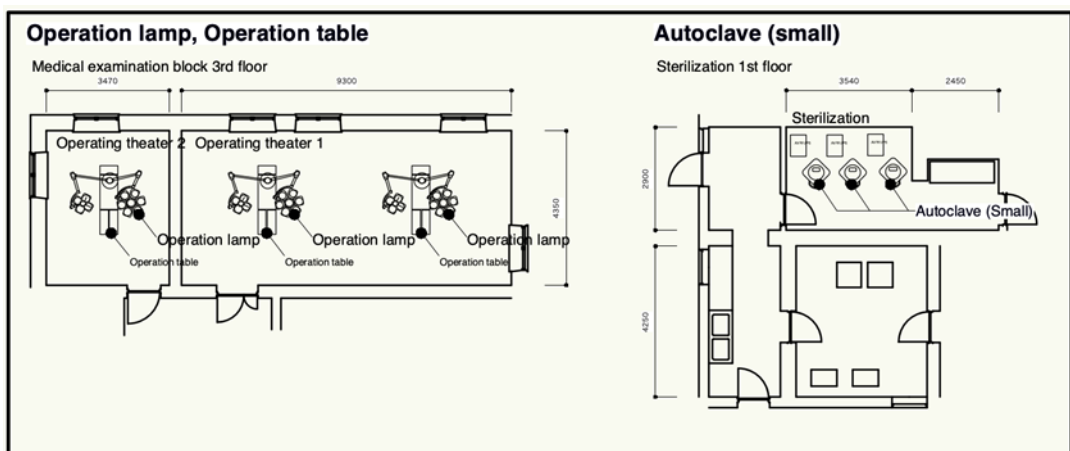


Figure 2-8 Tokmok Town General Practice Center layout plan

【Kemin District General Practice Center】

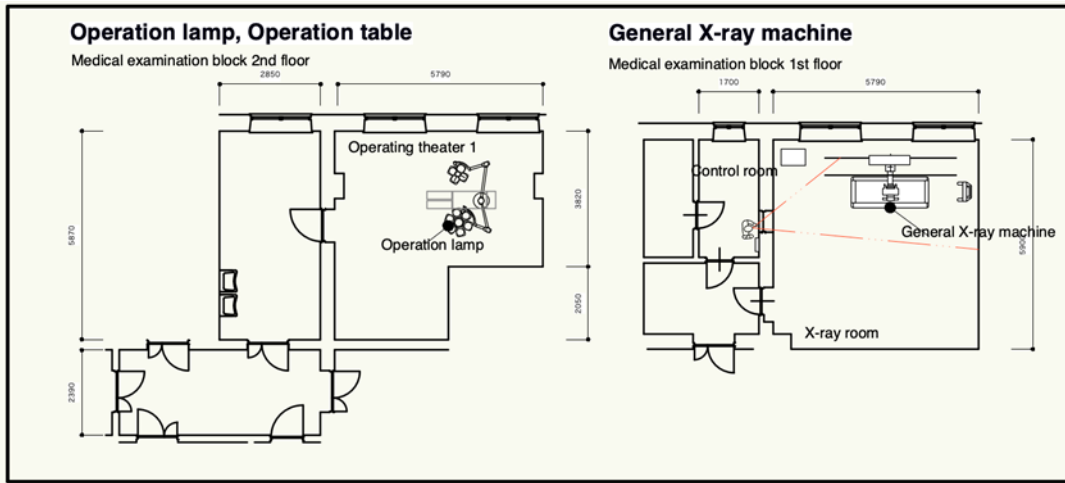


Figure 2-9 Kemin District General Practice Center layout plan

【Ivanovka Village's Branch of Issyk-Ata General Practice Center】

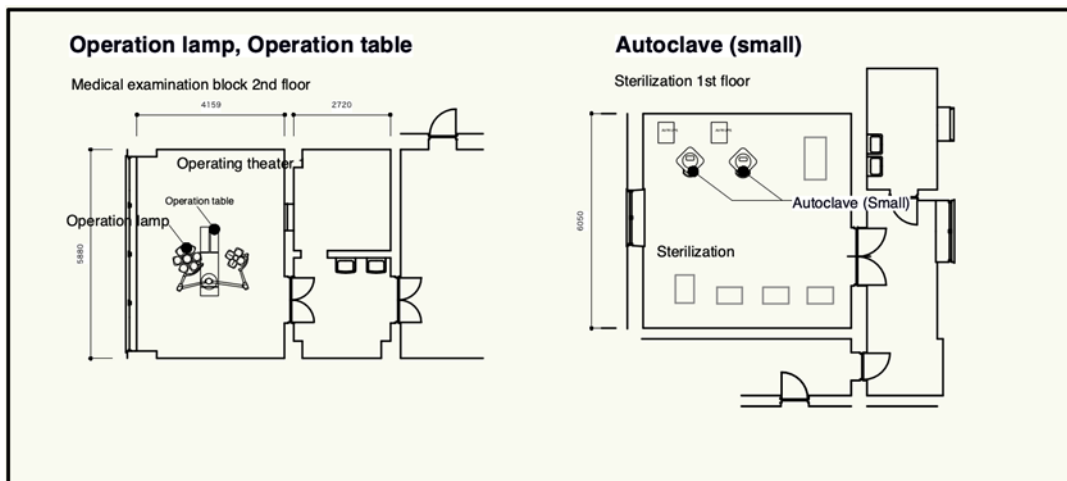


Figure 2-10 Ivanovka Village's Branch of Issyk-Ata General Practice Center layout plan

2-2-4 Implementation Plan

2-2-4-1 Implementation Policy

Implementation of the Project shall be initiated officially only after approval at the cabinet by the Governments, and after the exchange of notes (E/N) and the grant agreement (G/A) are signed. Immediately after signing of the E/N and the G/A, the Kyrgyzstan organization that is responsible for implementation of the Project and the Japanese consulting firms shall enter into an agreement and initiate the detailed design work of the Project. When the detail design is completed, the Japanese companies for equipment procurement participate in the tender for their works. The successful tenderer and Kyrgyzstan organization shall enter a contract and proceed for supply and installation of the medical equipment.

(1) Implementing Organizations

1) Executing Agency

The Executing Agency for this Project is MOH of Kyrgyzstan and a contracting party. Under the supervision by MOH, the targeted hospitals will conduct the work borne by the Kyrgyzstan side.

2) Japan International Cooperation Agency (JICA)

JICA will sign G/A with the Government of Kyrgyzstan and will review and monitor the Project for proper implementation in accordance with the Japanese Grant schemes.

3) Consultant

After signing of E/N and G/A for the Project, the Executing Agency of the Project and a Consultant in Japan will sign an agreement for the consulting services with MOH of Kyrgyzstan according to the processes of the Japanese Grant schemes. The Consultant will carry out the following works;

① Detailed Design Stage

Final confirmation of the Project, preparation of design documents (specifications and technical reference materials on the medical equipment included in the Project)

② Bidding Stage

Assistance to the Executing Agency in the bidding and contractual procedures (including preparation of bidding documents, bid openings, bid evaluation, contracts with Contractor and the Supplier)

③ Procurement Supervision

Supervisory works for equipment procurement, delivery, installation, operational guidance and maintenance guidance of equipment

④ Inspection before expiration of manufacturer's warranty

Inspection before expiration of manufacturer's warranty of 1 year for supplied equipment

⑤ Inspection of maintenance services

Inspection of implementation status of maintenance service and equipment conditions

The detailed design involves determining the details of the equipment plans according to the Preparatory Survey Report, compiling the tender documents that will include the specifications, tender conditions, draft conditions of contracts for supply and installation of medical equipment, and estimating equipment costs. The tender and contract assistance includes attendance at the tendering for the selection of the medical equipment supplier, assistance in the procedures for concluding a contract and reporting to JICA, etc.

The supervision of the equipment work involves ensuring that the Supplier has effectively carried out the medical equipment supply and installation work in accordance with the contractual terms, and confirming that they have properly met their contractual obligations. For the successful completion of the Project, the Consultant will: from a true and fair perspective, extend advice and instructions and coordinate the persons concerned. Specifically, the supervisory services of the Consultant include the following:

- ① Review and approval of the work program, equipment specifications and other documents prepared and submitted by the medical equipment supplier.
- ② Inspection and approval of the pre-shipment inspection and approval of the quality, quantity and performance of medical equipment.
- ③ Confirmation of the delivery and installation of equipment for the medical equipment, and their operation manuals.
- ④ Supervision of the work progress and reporting.
- ⑤ Final inspections of the medical equipment, and attendance during the handing-over.
- ⑥ Confirmation of implementation of maintenance services.

In addition to the aforementioned services, the Consultant will report to the Japanese authorities regarding the progress of the Project, payment procedures, completion of the Project and handing-over, etc.

4) Equipment Supplier

The work orders pertaining to the Japanese assistance will be limited to Japanese companies satisfying the eligibility requirements. Supplier will be selected by public tender with restricted eligibility.

Based on the contract, the selected equipment supplier will procure, supply and install medical equipment. The supplier will also give technical instructions to the Kyrgyzstan side concerning the operation and maintenance of the supplied equipment. Once the equipment is handed over, in cooperation with the agency of the equipment manufacturers, the equipment supplier will support the continuous supply of spare parts and consumables for the equipment during the maintenance contract period as well as after the maintenance contract has expired, either free of charge or on a chargeable basis.

(2) Project Implementation Diagram

The Consultant will form a project team to conduct the above-mentioned services in Japan and Kyrgyzstan.

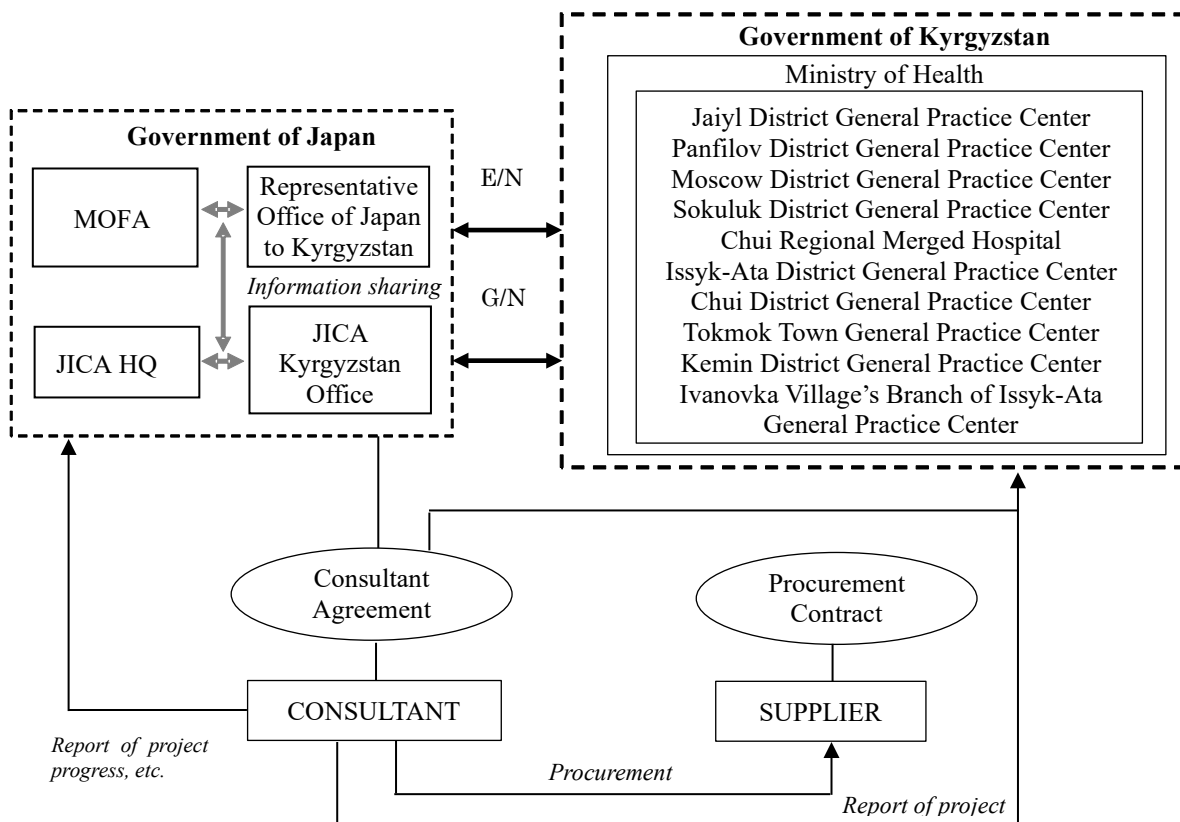


Figure 2-11 Project Implementation Diagram

(3) Monitoring on implementation of maintenance services by the Supplier after handing over of the equipment

The Consultant who is in charge of equipment will visit the targeted hospitals and the distributors of equipment once a year for 3 years after handing-over and confirm the situation of maintenance services that are included in the procurement contract. It will be reported to MoH, each hospital, and to JICA as well.

2-2-4-2 Implementation Conditions

(1) Schedule Management

The purpose of this Project is to replace deteriorated equipment and to provide new equipment that the hospitals currently do not sufficiently own. Since the targeted hospitals need the equipment as soon as possible, the Kyrgyzstan side strongly requested shortening the period for procurement, installation and handing-over. In response to the request, the survey team explained the procedures that cannot be avoided in implementing grant aid and the time requested for these procedures, but the team agreed to shorten the schedule to the extent possible. The Kyrgyzstan side also promised to prepare a bill on exemption or simplification of procedures for medical device registration to make efforts to shorten the implementation schedule.

In Kyrgyzstan, the number of local agents and engineers who can perform installation of procurement equipment are limited, and engineers need to be dispatched not only within the country but also from the surrounding countries. Hence, the schedule management such as equipment import, transport, installation and initial trainings will be carefully conducted.

(2) Dispatch of Technicians for Equipment Installation

It is extremely important to impart knowledge and skills regarding appropriate operation and maintenance of the equipment so as to contribute to medical service quality through continuous and proper operation of the procured equipment after implementation of the Project. That being the case, technicians who are thoroughly familiar with the operation of each type of equipment will be selected. Enough time for explanation of equipment handling (operation techniques, simple repair techniques, inspection methods, etc.) shall be taken, and the level of comprehension of the participants shall be confirmed carefully during training.

(3) Tax Exemption

1) Import duty

Custom clearance will be possible by presenting the following documents to the customs authority.

- International agreement (E/N, G/A)
- A letter from Ministry of Finance of the Kyrgyz Republic
- Contract between MOH and the Japanese trading company
- Shipping documents such as equipment invoice
- Appointment certificate from MOH
- Medical equipment registration certificate and Quality control certificate

(The quality control certificate is not possible to apply for in advance, and the application will be acceptable when the medical equipment arrives at the bonded warehouse. If the equipment already has an ISO certificate, the quality control certificate will be issued in about one week. If the equipment does not require the quality control certificate, an authorization letter for custom clearance will be issued upon application through the website.)

2) VAT

In Kyrgyzstan, a VAT of 12% is imposed. According to the local agent, it is not practical to provide tax exemption for products already imported into Kyrgyzstan because of the complicated refund procedure. Therefore, in the case that the Supplier purchases equipment from local distributors for the Project, tax exemption will be applied by newly importing the medical equipment only for the Project, which is the same process as import duty exemption.

(4) Medical Device Registration

All medical devices and peripheral devices used in Kyrgyzstan require medical device registration. Since registration is required for each model, even for products of the same manufacturer, registration should be done each time a model change is made. Registered medical devices can be viewed by anyone on the website (<http://www.pharm.kg/en/>) of the Department of Drug Supply and Medical Equipment which is the organization under MOH. However, peripheral devices are not publicly available, so it is necessary to inquire on a case-by-case basis to confirm whether they are registered or not. The fees and documents required for registration vary depending on the equipment, and a letter of attorney from the manufacturer, registration information from the manufacturer's headquarters and specification manuals and spec sheets, etc. are required. From January in 2022, it was originally planned that the common rules of the Eurasian Economic Union (hereinafter referred to as "EAEU"), of which Kyrgyzstan, Russia,

Kazakhstan, Belarus and Armenia are members would be applied to the registration, but it has been decided that the start time of application of the rules will be extended until 2023.

Currently, medical equipment registration is conducted according to Kyrgyz domestic regulations, and new registration takes about three months. The actual equipment is checked at the time of registration. In the past, licenses had an expiration date, and some registered equipment had a five-year expiration date. However, according to the current application rules, licenses are issued on a permanent basis, and a permanent license can be obtained by renewing the registration before the original expiration date in the case that the device has been registered with the five-year expiration date.

For medical devices that have been registered under the domestic regulations of each member country prior to 2022, the registration is limited to domestic use, but under the EAEU common regulations to be applied from 2023 onward, it will be possible to register medical devices for use within a member country as well. In such cases, the applicant may apply for a license for use in more than one member country by designating the adapted country and paying a registration fee for the adapted country as well. In order to register, after application, the product must be sent to an inspection station in a member country for product inspection. Since there is no designated inspection station in Kyrgyzstan, equipment is sent to inspection stations in member countries other than Kyrgyzstan for examination; due to this situation, it is not possible to complete the procedure in Kyrgyzstan alone, and additional fees must be paid to the member country where the inspection site is located. In the case of large equipment that is difficult to move, such as computed tomography (CT), inspectors will travel to the manufacturer's factory at the manufacturer's or distributor's expense to inspect the equipment. A bill is currently being drafted to simplify the procedures for use in Kyrgyzstan. Registration of medical devices in Kyrgyzstan will continue to be handled by the Department of Drug Supply and Medical Equipment.

Regarding this Project, MOH is preparing a bill to be enacted by the end of 2022 which would exempt medical device registration for the equipment procured in the Project. Even if it is not completely exempted, MOH has agreed to make a proposal to simplify the registration.

2-2-4-3 Scope of Works

Implementation of the Project is conducted under mutual cooperation between Japan and Kyrgyzstan sides. As the Project is implemented under Japan's grant aid, the scope of works undertaken by the Governments of both countries shall be as described below.

Table 2-6 Scope of Works

Items	Japan side	Kyrgyzstan side
Equipment work		
- Procurement	○	
- Installation work	○	
- Trial run and adjustment	○	
- Operation guidance	○	
- Legal procedures and inspections concerning installation		○
Utility work		
- Utility systems work in the building		○
- Connection of power, etc. to the procured equipment	○	
Securing space for equipment storage		○
Transportation and customs clearance		
- Transportation of equipment to the site	○	
- Customs clearance	○	○
- Tax exemption		○
Procedures for B/A and payment of commission fees		○
Provision of convenience to Japanese and/or physical persons of third countries concerned with the Project necessary for their embarkation, disembarkation and stay in Kyrgyzstan		○
Effective use and management of the procured equipment		○
Application for and acquisition of permits necessary for the Project implementation		○
Payment of all the costs of related tasks that are not covered by the Japanese Grant Aid		○

2-2-4-4 Consultant Supervision

(1) Procurement Supervision Policy

Under the grant aid policy of the Government of Japan, based on the concept of the outline design, the consultant forms a team that has a continuous responsibility to execute the project, including preparation of the detail design to achieve smooth and successful implementation. The procurement supervision policy for the Project is outlined below.

- ① To keep close contact with the persons in charge of the Project and represent related organizations of both countries so that installation of equipment will be completed without delay.
- ② To provide quick and appropriate advice and suggestions from a neutral standpoint to the Supplier(s) and others concerned.
- ③ To provide appropriate guidance and suggestions regarding operation and management after handing over.
- ④ To confirm that procurement work has been completed and the terms of contract are fulfilled and to observe handing over the equipment and obtain approval of receipt from the Kyrgyzstan side.

(2) Procurement Supervision Plan

The countries of procurement of this Project are Japan, Kyrgyzstan and third countries. When the equipment is shipped from Japan or third countries, the pre-shipment inspection(s) will be conducted by the third-party inspection agent at the port of embarkation. The Consultant will confirm the contents of the inspection certificate submitted by the inspection agent in writing. The Consultant will issue the inspection report and report to MOH of Kyrgyzstan right after the completion of pre-shipment inspection(s). The person in charge of MOH, each hospital, Supplier and Consultant will conduct the acceptance inspection for all procured equipment after installation and initial operation training and hand them over. Model name, country of origin, manufacturer name, ODA sticker, and appearance of the equipment, etc. will be checked during the acceptance inspection(s).

2-2-4-5 Quality Control Plan

Under this Project, in addition to Japanese manufacturers, the scope of procurement will be expanded to third countries. However, because it is necessary to avoid having the equipment selected only because of its price; the quality of equipment will be ensured by putting in place certain restrictions, such as limiting products to only those from DAC or OECD member countries and/or designated countries, and requiring equipment to comply with JIS, CE, IEC and other international standards.

As ready-made medical equipment will be procured for this Project, the quality control of

procured equipment will be also secured through factory acceptance inspections and pre-shipment inspections. The factory acceptance inspections will be carried out on the equipment that requires specific packaging, precision machines and large/heavy machines that cannot be checked for quality only at the pre-shipment inspections. The pre-shipment inspection will be conducted at designated warehouses at the seaport (or airport) for equipment procured in Japan and the third countries.

2-2-4-6 Procurement Plan

Medical equipment that is made in Kyrgyzstan is few, and Japanese products and third countries products will be procured. Reflecting this situation, procurement conditions will require local distributors who are located in Kyrgyzstan and its surrounding countries and who can provide after-sales services. In the case that the products are expanded to the third countries, the products should be able to be obtained in the Kyrgyzstan market, and the system for repairment and after-care and the diffusion rate should be carefully considered. Regarding technical skills, the local distributor engineers have expertise, and the engineers take manufacturer trainings in conjunction with procurement of medical equipment and obtain new certificates. However, it was revealed that the local distributors handle the cases of large equipment such as CT, supported by distributors in surrounding countries. Hence, local distributors which provide after-sales services in the Project will be expanded to neighboring countries such as Kazakhstan, Uzbekistan and Turkey, not limited to local distributors in Bishkek.

Equipment to be procured from Japan or the third countries will be transported to Bishkek in Kyrgyzstan by marine transportation and land transportation. The equipment brought from Japan will be transported by sea from a port in Japan to a port in Russia or China, and then transported by rail to Bishkek through Kazakhstan. After custom clearance, equipment will be brought from Bishkek to each hospital by truck. Previously, the route through China was mainly used for transportation from Japan to Kyrgyzstan, but due to COVID-19, the Chinese route has been in disarray, and freight cannot be railroded even after waiting for 3 to 5 months. Therefore, the transportation route has been shifting to the route via Russia. Under normal circumstances, it takes 40 to 50 days to arrive in Kyrgyzstan from Japan via Russia, but now it takes at least 3 months for delivery. Thus, as the delivery involves various transportation methods, the local special circumstances shall be carefully considered to achieve smooth and safe transportation.

2-2-4-7 Operation Guidance Plan

Under this Project, planned equipment is medical equipment, and care concerning operation and maintenance of the equipment should be taken as much as possible for safe and continuous use of the equipment. Therefore, it is essential to provide adequate instruction and training of operation and

maintenance regarding the equipment by dispatching skillful engineers from the equipment manufacturers or their local agents at the time of delivery. The Consultant will check if the guidance is properly performed and confirm if the persons in charge at the hospitals understand the guidance sufficiently.

2-2-4-8 Implementation Schedule

It is assumed that it will take about 2 months from the conclusion of the E/N and G/A to ratify them in Kyrgyzstan. The implementation schedule of the Project will be about 4 months for detailed design after the Consultant Contract is made, about 2 months for the bid and supplier contract, and about 8 months for the procurement and installation of the equipment. The implementation schedule of the Project is as follows.

Table 2-7 Project Implementation Schedule

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Detailed Design	■	Confirmation of field survey result																	
		□ Design development in Japan																	
			■ Approval of bid documents																
				□ Bidding															
						■ Analysis of bid				(6 months)									
Procurement		□ Confirmation of equipment design																	
		□ Equipment order																	
			■ Kickoff meeting																
								□	Conformation on work borne by the Kyrgyzstan side										
								□	Inspection in factories										
								□	Pre shipment inspection										
								□	Shipping										
									■ Transportation										
Pre-installation work by Kyrgyzstan side		□																	
Maintenance Services		- - - First year maintenance services																	
		- - - Second year maintenance services																	
		- - - Third year maintenance services																	
												■	Monitoring						
												■	Monitoring						
												■	Monitoring						

2-3 Obligations of the Recipient Country

(1) Work Borne by the Kyrgyzstan Side

Specific obligations of the Kyrgyzstan side which are confirmed during the site survey are described below.

Table 2-8 Work Borne by the Kyrgyzstan side

Before Bidding	<ul style="list-style-type: none"> ▪ To open bank account (B/A) ▪ To issue A/P to a bank in Japan (the Agent Bank) for the payment to the Consultant. ▪ To bear the following commissions to a bank in Japan for the banking services based upon the B/A. <ul style="list-style-type: none"> ➢ Advising commission of A/P ➢ Payment commission for A/P
During the Project Implementation until handing-over	<ul style="list-style-type: none"> ▪ To issue A/P to a bank in Japan (the Agent Bank) for the payment to the Supplier(s). ▪ To bear the following commissions to a bank in Japan for the banking services based upon the B/A. <ul style="list-style-type: none"> ➢ Advising commission of A/P ➢ Payment commission for A/P ▪ To ensure prompt unloading and customs clearance at ports of disembarkation and to assist the Supplier(s) with internal transportation therein (including proof documents and procedures if medical equipment registration if it is exempted for the Project). ▪ To accord Japanese nationals and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work. ▪ To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted. ▪ To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project, such as tables and chairs for general use, etc. ▪ To remove existing equipment and to rehabilitate facilities and utilities (electricity, water supply and drainage system). ▪ To prepare and submit the Project Monitoring Report (PMR). ▪ To prepare and submit the final PMR at the completion of the works. ▪ To allocate necessary staff.
After the Project	<ul style="list-style-type: none"> ▪ To secure maintenance cost for proper use and management of procured equipment. ▪ To organize the operation and maintenance structure. ▪ To implement daily check and regular inspection of procured equipment.

2-4 Project Operation Plan

(1) Operation Structure and Organization

Although MOH of Kyrgyzstan is the supervisory and executing body of the Project, the targeted hospitals are responsible for its operation and maintenance of the equipment after delivery. The purpose of the Project is to procure necessary medical equipment for NCDs in Bishkek city and Chui oblast, and the Project aims to strengthen the diagnosis ability and to improve the medical service level at the 10 targeted hospitals. According to the government of Kyrgyzstan, each hospital needs to allocate 1 equipment maintenance engineer per 100 beds, and based on the regulation, the hospitals need to make efforts concerning the necessary personnel allocation. In addition, the Project will provide skill trainings to the equipment maintenance engineer of the hospitals and the end-users such as doctors, nurses and laboratory technicians at the time of initial training and local distributor visits in order to achieve smooth implementation of hospital maintenance operation after equipment handing-over.

(2) Personnel Plan

In MOH of Kyrgyzstan, there is no department that can provide medical equipment maintenance, and maintenance of medical equipment is performed by maintenance agents who are contracted by each hospital. Although hospitals in Kyrgyzstan are supposed to have 1 equipment maintenance engineer per 100 beds, in reality, almost all the targeted hospitals are not able to secure the personnel. Reflecting the status quo, MOH and targeted hospitals agreed to implement necessary measure in cooperation to secure the personnel who can perform maintenance essential for equipment procured in the Project, supported by maintenance agents and local distributors.

(3) Maintenance Management Plan

During the initial operation training at installation, the plan provides operation training and daily inspection guidance to equipment maintenance engineers of the hospitals and end-users such as doctors, nurses and laboratory technicians. Furthermore, in order to secure appropriate management and maintenance of the equipment procured in the Project, maintenance contract by the Japan side is planned for the expensive, lifesaving and sensitive equipment for additional 2 years after the 1-year guarantee period expired. The maintenance contract includes on-call services and periodic inspection (ex., once every 3 months) by local distributor engineers. At the visits for periodic inspection, the parts that need to be replaced periodically will be changed, and instruction on daily inspection including the inspection items will be provided according to the needs during the visit by the local distributor engineers.

After handing-over of the equipment procured by the Project, the following maintenance should be performed.

1) Inspection at the start of work and cleaning/inspection at the end of work

Currently, periodic inspection of equipment is not performed at the targeted hospitals, and the hospitals request repairment only when malfunction occurs. However, it is preferable to perform inspection at the start of work, cleaning at the end of work, and periodic inspection to keep the equipment in good condition and prevent failure. Hence, at the handing-over of the equipment, the engineers for installation will provide instruction on cleaning and inspection of the equipment. In addition, during the maintenance contract period, trainings and confirmation by local distributor engineers at their visits for periodic inspection will be continuously given to the targeted hospitals, aiming for daily and periodic inspection to become established.

2) Calibration

Regarding laboratory analyzers, from the perspective of ensuring measurement accuracy, calibration must be done regularly. The targeted hospitals currently do not perform calibration, but some of the local distributors perform calibration as a courtesy offered by the distributors when they visit hospitals to replenish reagents, for example. In the Project, regarding the equipment that requires periodic maintenance, calibration will be done during visits of local distributor engineers for periodic inspection. However, from the 4th year when the maintenance contract by the Project ends, it is recommended that the hospitals enter into maintenance contracts with distributors by themselves and outsource periodic maintenance.

3) Repairment in case of failure

Almost none of the hospitals have an equipment maintenance engineer who can conduct equipment repairment, and when equipment failure occurs, the repairer will be decided by holding a bid after medical personnel on site takes the appropriate procedures. However, between the targeted hospitals and local distributors, it is preferable to continue the maintenance contract such as that the Project covers for 3 years after equipment handing-over to repair the equipment promptly when failure occurs and to make it usable for many years. Therefore, allocation of equipment maintenance engineers and continuation of the maintenance contract shall be recommended to the targeted hospitals, and a list which includes name of the distributors, and the name of the person in charge and their contact information will be also provided to the targeted hospitals at the time of equipment handing-over so that a system to smoothly respond to troubles without disrupting medical activities can be established.

4) Equipment inventory list

In MOH, there is a medical equipment department that manage information on all the equipment that national hospitals of the entire country have and their working status, and the system makes it possible to keep track of the equipment that each hospital owns at a central level. In the system, each hospital enters the information on the hospital equipment and their working status to the system accordingly, for which a person in charge of data management needs to be allocated in each hospital. Although an equipment maintenance engineer is supposed to be assigned to the position, an administrative staff is assigned full-time or concurrently because most of the hospitals do not have equipment maintenance engineers. Also, regarding the equipment procured in the Project, it will be requested to register promptly to monitor and manage the equipment appropriately. The information on the system has been updated accordingly, but there are no common rules of equipment numbers for management. As a result, the hospital assigns numbers based on their own rules, and medical equipment and office equipment such as PCs are mixed in the same category. Therefore, it is recommended to re-organize the categories.

2-5 Project Cost Estimation

2-5-1 Initial Cost Estimation

With the conditions of expenditure projection in (2) below, breakdowns of the expenditures borne by Kyrgyzstan under the said classification can be estimated as follows. This cost estimation is provisional.

(1) Costs to be borne by the Kyrgyzstan Side

Table 2-9 Costs to be borne by the Kyrgyzstan Side

Item	USD (in thousand)	JPY Equivalent (in million)
1) Removal cost of large existing equipment	19	2.1
(breakdown)		
Jaiyl District General Practice Center	2.5	
Panfilov District General Practice Center	1.5	
Moscow District General Practice Center	2.5	
Sokuluk District General Practice Center	2.0	
Chui Regional Merged Hospital	2.5	
Issyk-Ata District General Practice Center	2.5	
Chui District General Practice Center	2.0	
Tokmok Town General Practice Center	1.0	
Kemin District General Practice Center	2.0	
Ivanovka Village's Branch of Issyk-Ata General Practice Center	0.5	
2) Banking Commissions, etc.	9	1
Total	28	3.1

(2) Calculation Conditions

- Time of Estimation : As of October, 2021
- Conversion Rate : 1USD=JPY111.10, 1EUR=JPY131.32
- Procurement Period : As shown in the Project Implementation Schedule
- Others : Project implementation intended to be in compliance with the Grant Aid scheme of the GOJ.

2-5-2 Operation and Maintenance Costs

(1) Annual operation and maintenance costs

Annual operation and maintenance costs consist of repairment costs, consumables and replacements. The targeted hospitals need to cover costs for consumables from the first year after handing-over, whereas equipment failure will be covered by manufacture warranty. Until the 3rd year, no repairment costs are expected for the equipment covered by maintenance contract, but the equipment which is not covered by the contract assumes the cost for repairment if needed. From the 4th year and thereafter, as the maintenance contract of all the equipment will have expired each targeted hospital needs to renew the contract, otherwise the hospitals need to make a request to a manufacturer distributor when failure occurs.

The maintenance cost for the medical equipment procured in the Project is as follows. The average budget of the targeted hospitals was approximately 719,000 USD in the fiscal year of 2020, and the rate of the maintenance cost required for each hospital in the first year after handing-over was less than 4% of the budget. In addition, regarding maintenance cost and the cost for consumables and spare parts, MOH and each hospital checked the cost and agreed to secure the budget, supported by MOH. The hospitals are planning to allocate the necessary budget for equipment maintenance from medical fees earned by using equipment procured under the Project.

Table 2-10 Maintenance cost for medical equipment

(Unit: USD)

	Initial fiscal year	2 nd and 3 rd year	4 th year and after
Jaiyl District General Practice Center	0	876	105,024
Panfilov District General Practice Center	0	0	119,809
Moscow District General Practice Center	0	1,016	106,190
Sokuluk District General Practice Center	0	724	149,249
Chui Regional Merged Hospital	0	584	129,881
Issyk-Ata District General Practice Center	0	584	85,082
Chui District General Practice Center	0	0	126,131
Tokmok Town General Practice Center	0	1,016	67,658
Kemin District General Practice Center	0	864	107,089
Ivanovka Village's Branch of Issyk-Ata General Practice Center	0	724	69,319
Cost for repairment Subtotal	0	6,388	1,065,433
Jaiyl District General Practice Center	5,256	5,256	5,256
Panfilov District General Practice Center	17,721	17,721	17,721
Moscow District General Practice Center	16,385	16,385	16,385
Sokuluk District General Practice Center	17,077	17,077	17,077
Chui Regional Merged Hospital	12,151	12,151	12,151
Issyk-Ata District General Practice Center	11,520	11,520	11,520
Chui District General Practice Center	17,945	17,945	17,945
Tokmok Town General Practice Center	5,992	5,992	5,992
Kemin District General Practice Center	12,031	12,031	12,031
Ivanovka Village's Branch of Issyk-Ata General Practice Center	11,540	11,540	11,540
Cost for consumables and replacements Subtotal	127,619	127,619	127,619
Total	127,619	134,007	1,193,052

The details of cost for consumables are the following.

Table 2-11 Annual cost for consumables

No.	Name of Equipment	Q'ty	Consumables and Replacements	Unit price (USD)	Annual Requirement	Unit	Subtotal (USD)
1	General X-ray machine	8	-	-	-	-	-
2	Mobile X-ray machine	9	-	-	-	-	-
3	Ultrasound	13	Gel	7	5	bottle	455
			Recording paper	7	20	roll	1,820
4	Mobile ultrasound	6	Gel	7	2	bottle	84
			Recording paper	7	10	roll	420
5	ECG	6	Gel	7	2	bottle	84
			Recording paper	7	10	roll	420
6	Ventilator	21	Infant Respirator Set	412	2	Set	17,304
			Pediatric Respirator	412	2	Set	17,304
			Adult Respirator Set	412	2	Set	17,304
			Bacteria Filter	11	2	unit	462
7	Operation lamp	14	Handle	14	0.1	unit	20
8	Operation table	13	-	-	-	-	-
9	Mobile suction pump	8	Suction tube	10	5	box	400
			Filter	100	2	set	1,600
			Hose	50	2	set	800
10	Patient monitor	29	Infant probe	214	1	unit	6,206
			Pediatric probe	214	1	unit	6,206
			Adult probe	214	1	unit	6,206
			Electrode	1	100	unit	2,900
			Recording paper	7	15	roll	3,045
			Battery	100	0.5	unit	1,450
13	Autoclave (Small)	17	Gasket	27	1	unit	459
14	Biochemistry analyzer	6	Maintenance kit (Tube etc.)	1450	1	set	8,700
15	Centrifuge	6	-	-	-	-	-
16	Hematology analyzer	5	Maintenance kit (Tube etc.)	400	1	set	2,000
17	CR and image writer	9	X-ray film	374	6	box	20,196
18	Surgical instruments set (Major)	5	-	-	-	-	-
20	Gastrofiberscope	6	-	-	-	-	-
21	Colonofiberscope	2	-	-	-	-	-
22	Bronchofiberscope	2	-	-	-	-	-
23	Electrical coagulator	14	Handpiece	421	1	unit	5,894
			Blade	84	5	unit	5,880
						Total	127,619

*X-ray films are included in CR and image writer

*The handle for the operation lamp is supposed to be replaced every 10 years.

CHAPTER 3 PROJECT EVALUATION

CHAPTER 3 Project Evaluation

3-1 Preconditions

For the appropriate implementation of this plan, the Kyrgyzstan side needs to conduct management of tax exemptions, provision of convenience for imported materials and equipment, issuance of bank arrangement and payment authorization, and removal of existing equipment, etc. as explained in “2-3 Obligations of the Recipient Country”. It is assumed that the necessary procedures and works by the Kyrgyzstan side will be carried out without delay. In addition, securing necessary budget and human resources for the medical facility maintenance is also highlighted as the preconditions.

3-2 Necessary Inputs by the Recipient Country

Issues the Kyrgyzstan side should tackle for the realization and continuation of effects of the Project are listed below.

(1) Recruitment and allocation of appropriate human resources

It is important to allocate equipment maintenance engineers to operate and maintain the medical equipment newly procured by the Project. As hospitals are supposed to have 1 equipment maintenance engineer per 100 beds in Kyrgyzstan, MOH and each targeted hospital should make every reasonable effort to allocate the maintenance engineer before equipment installation of the Project begins to involve the engineers in the initial operation trainings.

(2) Securing a budget for facility operation and equipment maintenance

In order to achieve the effects of the Project, MoH and each targeted hospital need to secure the increased amount of budget as is described in “2-5-2 Operation and Maintenance Cost” and operate and maintain the provided equipment appropriately.

(3) Capacity improvement of human resources

In order for the targeted hospitals to continue appropriate maintenance management, it is necessary to improve the maintenance management skills of the hospitals. Therefore, in the Project, it is planned to improve equipment maintenance ability of each hospital through initial operation trainings at the time of installation as well as instruction and feedback during visits of local distributor engineers for periodic inspection which is covered by the maintenance contract of the Project. It is important for the hospitals to utilize the skills learned from these efforts and conduct daily and periodic inspection to maintain the equipment appropriately, organizing in-hospital training and in-region training.

3-3 Important Assumptions

The External conditions: the spread of COVID-19 began in 2020, the spread of new infectious diseases and the deterioration of public security as well as the occurrence of conflicts and wars, will not seriously hinder the procurement of equipment and traveling to the site, and the travel and stay of project personnel in Kyrgyzstan will be ensured.

3-4 Project Evaluations

3-4-1 Relevance

(1) Beneficiaries of the project

The population of approximately 2.05 million people who lives in Bishkek city and Chui oblast: together accounting for one-third of the total national population, is the beneficiary of the Project. Due to the geographical proximity of Chui oblast to Bishkek city where the tertiary hospitals are concentrated, the cases where residents in Chui oblast (patients) visit the tertiary hospitals directly are often seen, not depending on the severity of their conditions. Therefore, the tertiary hospitals are significantly overcrowded with those patients in addition to the patients who are referred from secondary hospitals of Chui oblast; as a result, the tertiary hospitals do not fully function. Considering the status quo, this Project could be said to be highly significant regarding reducing unnecessary patient visits from the hospitals in Chui oblast to the tertiary hospitals by procurement of medical equipment, by ensuring the necessary treatment and diagnosis available in Chui oblast.

(2) In a view of improvement in geographical access to medical services

Through procurement of the necessary medical equipment for the targeted secondary hospitals in Chui oblast, the hospitals will be able to perform appropriate medical services as a secondary hospital. This enables the patients who were previously forced to refer to Bishkek city to receive medical consultation, diagnosis and treatment in their neighboring areas at early stages, resulting in reduction of both the patient physical burden and the financial burden of the patient family.

(3) Consistency with Kyrgyzstan's development plans

The Kyrgyz government has set a goal of reducing deaths among the young generation under 70 years old due to NCDs (cardiovascular disease, cancer, diabetes, chronic obstructive pulmonary disease, etc.) to one-third as a health sector goal of the national long-term strategy “National Development Strategy 2018-2040” and also of the sector-specific strategy “The National Public Health Protection and Health System Development Programme”, and the government has promoted improvement of the health care system for early detection and treatment of diseases at secondary hospitals. In addition, under the current circumstances with COVID-19, having a NCD as an underlying disease is considered as a risk

factor resulting in serious conditions of COVID-19; therefore, it is even more important to detect and treat NCDs at an early stage. Through procurement of medical equipment for diagnosis and treatment of NCDs at medical facilities (regional and district hospitals) in Bishkek city and Chui oblast, which are the base of public medical service provision, the Project aims to strengthen the diagnosis and treatment system at each targeted hospital to contribute to improvement in the quality of medical services. Thus, the Project is considered essential and a high priority for the improvement in health care system that the government of Kyrgyzstan aims for, and the expectation of the Kyrgyzstan government and contribution of the Project are considered to be significantly high.

(4) Consistency with Japan's Aid Policy

The priority area, “Rebuilding of Social infrastructure” of “Country Development Cooperation Policy for the Kyrgyz Republic (February 2012)”, is defined as aiming to improve the living standard of the people through support for the health care sector. Also, in “Country Analysis Paper for the Kyrgyz Republic (March 2020)”, the social sector strengthening program is highlighted as a priority issue, and it is considered that improvement in healthcare services of deteriorated health infrastructure (facilities and equipment) and strengthening of maintenance ability are important. Thus, the Project matches these policies and analyses.

3-4-2 Effectiveness

The output expected from the implementation of the Project are as follows.

(1) Quantitative effects

The output expected from the implementation of the Project are as follows.

Table 3-1 Output indicators of the Project

Outcome	Base value (Actual value in 2020)	Target value (by 2027) 【3 years after the project completion】
The number of inpatients and outpatients (per year)	77,137 people	92,000 people
The number of general X-ray examinations (per year)	77,089 cases	85,000 cases
The number of gastrofiberscope examinations (per year)	1,680 cases	4,560 cases

1) The base line numbers

The base value was set from the data that was taken during the first field survey in 2020.

2) The target numbers

- ① It was assumed that, on average, approximately 20% of patients who should have chosen the targeted hospitals visit other hospitals (private and tertiary hospitals). Therefore, the target values on the number of inpatient and outpatient (per year) were calculated based on the assumption that the number of inpatients and outpatients of the hospitals will be increased by 20% after procurement of medical equipment.
- ② The target values were set up with the assumption that the number of general X-ray examination will be increased by approximately 20%, which is the same increase as the number of inpatients and outpatients. However, the maximum number of the cases was limited to 12,000 per year (up to 50 cases per day according to the interviews at the first field survey).
- ③ Considering the facts that there are only one endoscope room, 1 or 2 physicians who can perform endoscopy examination in the hospitals and endoscopes are washed by hands, the target value of gastrofiberscope per year was set as 3 cases per day.

The target values of each targeted hospitals are as follows.

Table 3-2 The base values of each targeted hospitals

	Jaiyl District	Panfilov District	Moscow District	Sokuluk District	Chui Regional	Issyk-Ata District
The number of patients (inpatient and outpatient)	12,707	3,008	6,397	8,825	15,873	9,278
The number of general X-ray examinations	5,089	4,800	9,600	7,200	12,000	12,000
The number of gastrofiberscope examinations	435	0	0	286	740	125
	Chui District	Tokmok Town	Kemin District	Ivanovka Village's Branch	Total	
The number of patients (inpatient and outpatient)	6,847	8,698	2,144	3,360	77,137	
The number of general X-ray examinations	12,000	12,000	2,400	0	77,089	
The number of gastrofiberscope examinations	94	0	0	0	1,680	

Table 3-3 The target values of each targeted hospitals

	Jaiyl District	Panfilov District	Moscow District	Sokuluk District	Chui Regional	Issyk-Ata District
The number of patients (inpatient and outpatient)	15,248	3,610	7,676	10,590	19,048	11,134
The number of general X-ray examinations	6,107	5,760	11,520	8,640	12,000	12,000
The number of gastrofiberscope examinations	720	720	0	720	960	720
	Chui District	Tokmok Town	Kemin District	Ivanovka Village's Branch	Total	Target value
The number of patients (inpatient and outpatient)	8,216	10,438	2,573	3,532	92,064	92,000
The number of general X-ray examinations	12,000	12,000	2,880	2,100	85,007	85,000
The number of gastrofiberscope examinations	0	720	0	0	4,560	4,560

(2) Qualitative effects

The output expected by implementation of the Project is as follows. The qualitative effects will be measured through interviews and questionnaires.

1) Increase of patient satisfaction

By procurement of medical equipment, the patients who were previously referred to the tertiary hospitals and private hospitals in Bishkek city will be able to receive appropriate medical services in the targeted secondary hospitals. The geographical access in the areas will be also improved, which will reduce the physical and financial burden of transfer. These are expected to result in the improvement of patient satisfaction.

2) Improvement of medical services in the targeted hospitals

By procuring and replacing advanced medical diagnostic and treatment equipment, the target hospitals which are the base of each area, will be able to examine, diagnose, and treat patients who were previously referred to other hospitals, enabling early detection and treatment of NCDs and other diseases. Furthermore, procurement of necessary equipment that the targeted hospitals currently do not have and replacement of deteriorated equipment will contribute to improved accuracy and efficiency of diagnosis and treatment, resulting in improving medical services. Considering those positive impacts brought by the Project, it is considered that the number of patients who visit the target hospitals will be increased because of their improved medical service quality. Hence, the hospitals staff and patients will be interviewed to evaluate the qualitative effects regarding matters such as: ① If they think the number of patients has been increased, ② If they feel the number of referral cases to tertiary hospitals has been decreased, ③ If they think the hospitals have been able to provide sufficient medical services by the procurement of equipment by the Project, ④ If they feel waiting time at the hospitals have been shortened.

3-4-3 Conclusion

Based on the above, it is concluded that the Project is highly appropriate and is expected to be significantly effective.

APPENDICES

1. Member List of Survey Team
2. Survey Schedule
3. List of Parties Concerned in the Recipient Country
4. Minutes of Discussions
5. Planned Equipment List of Each Hospital
6. Evaluation Chart of Requested Equipment

Appendix 1 Member List of Survey Team

1-1 Field Survey 1 (25 September, 2021-24 October, 2021)

Name	Sociality	Title, Organization
Team Leader	Mr. Tatsuya ASHIDA	Director of Health Team 4, Health Group 2, Human Development Department, JICA
Technical Advisor	Dr. Rei KANSAKU	Senior Advisor, Human Development Department, JICA
Program Coordinator	Ms. Risa HANATO	Health Team 4, Health Group 2, Human Development Department, JICA
Chief Consultant/ Equipment Planning 1	Mr. Takashi MORITA	INTEM Consulting, Inc.
Equipment Maintenance Planning	Mr. Yasumich DOI	INTEM Consulting, Inc.
Procurement Planning/ Cost Estimation	Ms. Kyoko ARITA	INTEM Consulting, Inc.
Architectural Planning	Mr. Nobuo WAIDA	Waida Architectural Design Office
Facility Planning	Mr. Mitsuhiro NASU	INTEM Consulting, Inc.
Health Planning 1/ Gender Concerns	Mr. Yoshinori MATSUNO	Yakuzemi Informative Education Center Co.,Ltd
Health Planning 2/Digital Health/Health Needs Survey	Ms. Misato OHARA	INTEM Consulting, Inc.

1-2 Draft Outline Design Explanatory Mission (5 Mar, 2022-20 Mar, 2022)

Name	Sociality	Title, Organization
Team Leader	Mr. Tatsuya ASHIDA	Director of Health Team 4, Health Group 2, Human Development Department, JICA
Technical Advisor	Dr. Rei KANSAKU	Senior Advisor, Human Development Department, JICA
Program Coordinator	Ms. Risa HANATO	Health Team 4, Health Group 2, Human Development Department, JICA
Site visit member		
Chief Consultant/ Equipment Planning 1	Mr. Takashi MORITA	INTEM Consulting, Inc.
Equipment Maintenance Planning	Mr. Yasumich DOI	INTEM Consulting, Inc.

Appendix 2 Survey Schedule

2-1. Field Survey 1 (25 September, 2021-24 October, 2021)

Date			JICA member	Chief Consultant/ Equipment planning	Equipment Maintenance Planning	Equipment Procurement/ Cost estimation	Architectural Plannin	Facility Planning	Health Planning 1/ Gender Concerns	Health Planning 2/ Digital Health/ Health Needs Survey
			Stay 14	Stay 30	Stay 23	Stay 16	Stay 22	Stay 16	Stay 21	Stay 23
25-Sep-21	Sat	1		Japan→Istanbul						Japan→Istanbul
26-Sep-21	Sun	2		Istanbul→					Japan→Istanbul	Istanbul→
27-Sep-21	Mon	3		Bishkek (1:55) JICA, MOH					Istanbul→	Bishkek (1:55) JICA, MOH
28-Sep-21	Tue	4		Hospital visit (Jaiyl, Sokuluk, Moscow)					Bishkek (1:55) Other project	Hospital visit (Jaiyl, Sokuluk, Moscow)
29-Sep-21	Wed	5		Hospital visit (Kemin, Tokmok, Chui District)					Other project	Hospital visit (Kemin, Tokmok, Chui District)
30-Sep-21	Thu	6		Hospital visit (National hospital, National Center for Oncology and Hematology, National Center of Cardiology and Therapy)					Other project	Hospital visit (National hospital, National Center for Oncology and Hematology, National Center of Cardiology and Therapy)
1-Oct-21	Fri	7		Hospital visit (Chui Regional, Issyk-Ata) MOH					Other project	Hospital visit (Chui Regional, Issyk-Ata) MOH
2-Oct-21	Sat	8		Team meeting	Japan→Istanbul		Japan→Istanbul		Team meeting	Team meeting
3-Oct-21	Sun	9		Team meeting	Istanbul→		Istanbul→		Team meeting	Team meeting
4-Oct-21	Mon	10		Discussion on medical equipment (Jaiyl)	Bishkek (1:55) Discussion on medical equipment (Jaiyl)		Bishkek (1:55) Discussion on medical equipment (Jaiyl)		Discussion on medical equipment (Jaiyl)	Discussion on medical equipment (Jaiyl)
5-Oct-21	Tue	11		Discussion on medical equipment (National Center for Oncology and Hematology)	Discussion on medical equipment (National Center for Oncology and Hematology)		Discussion on medical equipment (National Center for Oncology and Hematology)		Discussion on medical equipment (National Center for Oncology and Hematology)	Discussion on medical equipment (National Center for Oncology and Hematology)
6-Oct-21	Wed	12		Discussion on medical equipment (Issyk-Ata, Ivanovka)	Discussion on medical equipment (Issyk-Ata, Ivanovka)		Discussion on medical equipment (Issyk-Ata, Ivanovka)		e-health center	e-health center
7-Oct-21	Thu	13		Discussion on medical equipment (Kemin, Chui District)	Discussion on medical equipment (Kemin, Chui District)		Discussion on medical equipment (Kemin, Chui District)		Discussion on medical equipment (Kemin, Chui District)	Discussion on medical equipment (Kemin, Chui District)
8-Oct-21	Fri	14		Discussion on medical equipment (Tokmok)	Discussion on medical equipment (Tokmok)		Discussion on medical equipment (Tokmok)		Discussion on medical equipment (Tokmok)	Discussion on medical equipment (Tokmok)
9-Oct-21	Sat	15		Japan→Istanbul	Team meeting	Japan→Istanbul	Team meeting	Japan→Istanbul	Team meeting	Team meeting
10-Oct-21	Sun	16		Istanbul→	Team meeting	Istanbul→	Team meeting	Istanbul→	Team meeting	Team meeting
11-Oct-21	Mon	17		Bishkek (1:55) JICA, MOH	Discussion on medical equipment (National hospital)	Bishkek (1:55) JICA, MOH, Discussion on medical equipment (National hospital)	Facility survey (National hospital)	Bishkek (1:55) Facility survey (National hospital)	Health planning survey (National hospital), FOMS	Health planning survey (National hospital), FOMS
12-Oct-21	Tue	18		Hospital visit	Discussion on medical equipment (Chui Regional)	Discussion on medical equipment (Chui Regional)	Facility survey (Chui Regional)	Facility survey (Chui Regional)	Health planning survey (Chui Regional, e-health center)	Health planning survey (Chui Regional, e-health center)
13-Oct-21	Wed	19		Hospital visit	Discussion on medical equipment (Sokuluk, Moscow)	Discussion on medical equipment (Sokuluk, Moscow)	Facility survey (Sokuluk, Moscow)	Facility survey (Sokuluk, Moscow)	Health planning survey (Sokuluk, Moscow)	Health planning survey (Sokuluk, Moscow)
14-Oct-21	Thu	20		Hospital visit	Discussion on medical equipment (National Center of Cardiology and Therapy), Health needs survey (Diabetes center)	Discussion on medical equipment (National Center of Cardiology and Therapy), Local distributor survey	Discussion on medical equipment (National Center of Cardiology and Therapy), Local distributor survey	Facility survey (National Center of Cardiology and Therapy)	Health planning survey (National Center of Cardiology and Therapy)	Health planning survey (National Center of Cardiology and Therapy), Health needs survey (Diabetes center)
15-Oct-21	Fri	21		Hospital visit	Health needs survey (Diabetes center), Discussion on medical equipment (National hospital)	Discussion on medical equipment (National hospital)	Discussion on medical equipment (National hospital)	Facility survey (Jaiyl, Panfilov)	Facility survey (Jaiyl, Panfilov)	Health planning survey (Jaiyl, Panfilov), Discussion on medical equipment (National hospital)
16-Oct-21	Sat	22		M/D draft preparation	M/D draft preparation	M/D draft preparation	M/D draft preparation	Team meeting	Team meeting	Team meeting
17-Oct-21	Sun	23		Minutes of Discussion, Team meeting	Discussion with JICA, Minutes of Discussion, Team meeting	Discussion with JICA, Minutes of Discussion, Team meeting	Discussion with JICA, Minutes of Discussion, Team meeting	Discussion with JICA, Minutes of Discussion, Team meeting	Discussion with JICA, Minutes of Discussion, Team meeting	Bishkek→ Istanbul Istanbul→ Japan (19:20)
18-Oct-21	Mon	24		Minutes of Discussion	Procurement survey, Department of Drug Supply and Medical Equipment	Procurement survey, Department of Drug Supply and Medical Equipment	Procurement survey, Department of Drug Supply and Medical Equipment	Facility survey (Issyk-Ata, Ivanovka)	Facility survey (Issyk-Ata, Ivanovka)	FOMS
19-Oct-21	Tue	25		Minutes of Discussion	Procurement survey Minutes of Discussion	Procurement survey	Procurement survey	Facility survey (Tokmok, Chui District)	Facility survey (Tokmok, Chui District)	Health planning survey (National Center for Oncology and Hematology)
20-Oct-21	Wed	26		Signing M/D with MoH, Reporting to Embassy	Signing M/D with MoH, Reporting to Embassy	Procurement survey, MOH, Monitoring Department	Procurement survey, MOH, Monitoring Department	Factory visit	Factory visit	Health planning survey (Issyk-Ata) e-health center
21-Oct-21	Thu	27		Bishkek→ Istanbul	Discussion on medical equipment (Jaiyl, Panfilov)	Procurement survey	Procurement survey	Building materials survey	Building materials survey	Referral questionnaire collection
22-Oct-21	Fri	28		Istanbul→ Japan (19:20)	Discussion on medical equipment (National Center of Cardiology and Therapy)	Procurement survey, MOH Sanitary management unit	Procurement survey, MOH Sanitary management unit	Bishkek→ Istanbul	Facility survey (Issyk-Ata, National Center for Oncology and Hematology)	e-health center Referral questionnaire collection
23-Oct-21	Sat	29		Bishkek→ Istanbul	Bishkek→ Istanbul	Bishkek→ Istanbul	Istanbul→ Japan (19:20)	Istanbul→ Istanbul	Other project	
24-Oct-21	Sun	30		Istanbul→ Japan (19:20)	Istanbul→ Japan (19:20)	Istanbul→ Japan (19:20)	Istanbul→ Japan (19:20)	Istanbul→ Japan (19:20)	Other project	

2-2. Field Survey 2 (5 Mar, 2022-20 Mar, 2022)

Date			Chief Consultant/ Equipment planning	Equipment Maintenance Planning
			Stay 16	Stay 16
5-Mar-22	Sat	1	Japan→Istanbul	Japan→Istanbul
6-Mar-22	Sun	2	Istanbul→	Istanbul→
7-Mar-22	Mon	3	Bishkek (2:40) JICA, Local distributor	Bishkek (2:40) JICA, Local distributor
8-Mar-22	Tue	4	Team meeting	Team meeting
9-Mar-22	Wed	5	Discussion on medical equipment (Sokuluk, Moscow)	Discussion on medical equipment (Sokuluk, Moscow)
10-Mar-22	Thu	6	MOH, Discussion on medical equipment (Chui Regional)	MOH, Discussion on medical equipment (Chui Regional)
11-Mar-22	Fri	7	Discussion on medical equipment (Issyk-Ata, Ivanovka, Kemin)	Discussion on medical equipment (Issyk-Ata, Ivanovka, Kemin)
12-Mar-22	Sat	8	Team meeting	Team meeting
13-Mar-22	Sun	9	Team meeting	Team meeting
14-Mar-22	Mon	10	Discussion on medical equipment (Jaiyl, Panfilov)	Discussion on medical equipment (Jaiyl, Panfilov)
15-Mar-22	Tue	11	Discussion on medical equipment (Chui District, Tokmok)	Discussion on medical equipment (Chui District, Tokmok)
16-Mar-22	Wed	12	JICA. Team meeting	JICA. Team meeting
17-Mar-22	Thu	13	Discussion with MOH	Discussion with MOH
18-Mar-22	Fri	14	Signing M/D with MoH	Signing M/D with MoH
19-Mar-22	Sat	15	Bishkek→ Istanbul	Bishkek→ Istanbul
20-Mar-22	Sun	16	Istanbul→ Japan (19:45)	Istanbul→ Japan (19:45)

Appendix 3 List of Parties Concerned in the Recipient Country

Institution	Name	Department, Position
MOH	Ramatoulaye Jalalidin Mamayusupovich	Deputy Minister
	Zhangaziev Bakyt	MOH KR Deputy Minister
	Ismailov Meder Adyshevich	Head of department of Strategic Planning and Program Implementation
	Dolonbaeva Zuura Adbibaitovna	Head of International Cooperation department
	Asel Bolotovna	Deputy representative of family doctor of Chui region
	Mambetisaeva Anara	Specialist of department of Health Care Organization and Drug Policy
	Zhusupbekova Nurida Erkinbekovna	Head of Medical service supply and Public health department
	Kalmamatov Kubanychbek	Unit head of Primary healthcare and Drug Policy of Medical service supply and public health department
	Masaliev Osmon Satarovich	Head of international Collaboration unit
	Arstanbek Toktomushovich	Sector head of medical equipment management of Monitoring Department
	Kurmanaliev Samsaly Omorovich	Sector head of medical equipment management of Monitoring Department
	Tumurlan A. Kysanov	Deputy Director of Medicines and Medical Equipment department under MOH
	Chinara Murzakmatovna	Deputy head of Medical and Pharmaceutical Services Department

Institution	Name	Department, Position
	Abalieva Ainura Imankulovna	Head of department of Drug Supply and Medical Equipment
	Osmonali S. Masaliev	Department head of international Collaboration unit
	Kazybaev Narynbek	Bureau director of Sanitary management
Jaiyl District General Practice Center	Imasheva Ainura	President of the hospital
	Aida sulaimanovma	Department of statistics
Panfilov District General Practice Center	Abdykalykov Jalil	President of the hospital
Moscow District General Practice Center	Sherimbaev Bolot	President of the hospital
	Ablabekova Nazgul	Vice President
	Dzheenaliov Beknazar	Physician (Surgical operating room)
	Asanakunova Aida	Physician (ICU)
	Kurmanova Gulzat	Obstetrics
	Polotova Gulbara	Gynecology
	Lymatev Vlodym	Chest X-ray room
	Gulua Ardynbaevo	Clinical laboratory room
	Vasilova Olga	Blood transfusion room
	Lymarev Vladimir	X-ray room
Husnutdinova Suetiana	Ultrasound room at admission reception	
Sokuluk District General Practice Center	Kitaeva Venera	President of the hospital
	Mederlecova. E	Vice President
	Baefgobekov Taelay	Operation room
	Otobaov Azamat	Trauma operating room
	Denisova Lyudnilo	X-ray room
	Musabaeva Damira	Cardiology
	Nuradylova Anara	Internal Medicine
	Tuzabaev Gulnara	Neurology
	Jantaeva Eluira	Obstetrics and Gynecology
	Madamov Adyl	ICU
Karatoeva Richurok	Clinical laboratory room	

Institution	Name	Department, Position
Chui Regional Merged Hospital	Bolotbekov B.A	President of the hospital
	Boobekova K.M	Vice President
	Beishekeeva Kumushai	Vice President
	Shonaev Zhumafazy	Physician (ICU)
	Mamataliev Ivurbea	X-Ray Room at primary trauma unit
	Arzymatov Ruslan	Trauma operating room
	Mamoeva Kakym	Sterilization room
	Tsaifa Vera	Laundry room
	Isabekov Ruskan	Physician (Urology)
	Saposbaev Rubatbek	Physician (Otolaryngology)
	Dpyshov Alybec	Physician (Neurology)
	Bukalaeva Kolivan	Physician (Pediatrics)
	Jecnbekova Jyngal	Physician (Cardiology)
	Saty Pecova Cholpon	Outpatient examination room
Uzagaliova Shourgul	Obstetrics	
Issyk-Ata District General Practice Center	Mukaeva Roza	President of the hospital
	Nurgazy. H	Vice President
Chui District General Practice Center	Abdrahmanov Nurbek	President of the hospital
	Idrisova Kayirgul	Physician (Primary laboratory room)
	Aibashova Mairam	Primary laboratory room
	Toktofulova Zina	Nurse (Primary ECG Room)
	Tursunov Azamat	Surgeon (Primary unit)
	Imakaeva Suyun	Physician (X-ray room)
	Bakasova Nazgul	Nurse (X-ray room)
	Mtkeev Asanbek	ICU Physician
	Barakasova Nazful	Physician (Laboratory room)
	Imanalieva Anata	Physician (Maternity)
	Isirailov Natbek	Physician (Operating room)
	Usabaliev Kerim	Internist
Panchenko Lyudmila	Nurse (Sterilization room)	
Tokmok Town General Practice Center	Dyikanaliev Ulan Kubanychbekov	President of the hospital
	Bakeev Mirlan	
	Matkerimova Venera Akylbekovna	

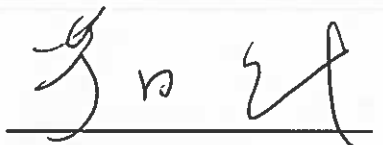
Institution	Name	Department, Position
	Zhumasheva Gulmira	Nurse (Cardiac surgery)
	Ibraimov Beken	Physician (X-ray room)
	Imannboou Kurmanbek	Physician (Operating room)
	Mamuthojaeva Gululmira	Sterilization room
	Sutenoda Anasa	Pediatrics
Kemin District General Practice Center	Omurkanov Azret	Vice President
	Kadyrkulova Ainur Topchubaeva	Doctor analysist
	Eaktygul Sharsheeva	Physician (X-ray room)
	Moldoyanova Cholpon	Ultrasound room
	Zholdosheva Venera	Physician (ICU)
	Akyl Zhenisbekovich	Physician (Operating room)
	Aigul Ularbaevra	Physician (Obstetrics)
	Jusupova Cholopan	Nurse (Sterilization room)
	Ms. Kuljabaevo	Physician (Examination room)
	Ms. Cholponay	Doctor (Ophthalmology)
	Chotbaeva Dinara Abdrasulova	Nursing director
Ivanovka Village's Branch of Issyk-Ata General Practice Center	Turatbekov Bakay	President of the hospital
National hospital	Maanaev Toktobay Israyilovich	President of the hospital
	Kulukeyev Ulukbek	Deputy chief physician
	Baisekeyev Taelaibek	Physician (Surgical sngiography)
	Mr.Akmatob	Surgeon (Emergency response unit)
	Mamytov Mitalip	Former minister of health
National Center of Cardiology and Therapy	Akpay SH. Sarybaev	President of the hospital
	Nazgul A. Omurzakova	Vice President
	Djumabaev Mamyraim	Vice President
National Center for Oncology and Hematology	Suiutbek M. Doolotbekov	Vice President
Diagnostic Center	Beishenov Ashimbek	Vice President
Diabetes Center	Dobrynine Watalia	President of the center
e-Health Center	Timur Alkozhoev	President of the center
	Murzakarimova Larisa	Vice president of the center
	Motoeva Arystanbek	IT department specialist

**Minutes of Discussions
on the Preparatory Survey for the Project for
Improvement of Medical Equipment in Bishkek City and Chui Oblast**

Based on the several preliminary discussions between the Government of Kyrgyz Republic (hereinafter referred to as “Kyrgyzstan”) and Japan International Cooperation Agency, (hereinafter referred to as “JICA”) dispatched the Preparatory Survey Team for the Outline Design (hereinafter referred to as “the Team”) of the Project for Improvement of Medical Equipment in Bishkek City and Chui Oblast (hereinafter referred to as “the Project”) to Kyrgyzstan, headed by Mr. Tatsuya Ashida, Director of Human Development Department JICA, from 25th September to 24th October 2021.

The Team held a series of discussions with the officials of the Government of Kyrgyzstan and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Bishkek, 20th October 2021



Mr. Tatsuya Ashida
Team Leader
Preparatory Survey Team
Japan International Cooperation Agency
Japan



Mr. Zhalalidin Rakhmatullaev
Deputy Minister
Ministry of Health of the Kyrgyz Republic
The Kyrgyz Republic

ATTACHMENT

1. Objective of the Project

The objective of the Project is to strengthen diagnosis and treatment capacity by providing medical equipment for diagnosis and treatment to healthcare organizations in Bishkek city and Chui oblast, which is a base of medical service provision, there by contributes to enhancing the quality of health care services

2. Title of the Project

Both sides confirmed the appropriate title of the Project is “The Project for Improvement of Medical Equipment in Bishkek City and Chui Oblast”. The title will be decided by Government of Japan through the official approval process.

3. Project site

Both sides confirmed that the sites of the Project are in Bishkek and Chui oblast, Kyrgyzstan, which is shown in Annex 1.

4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

- 4-1. The Ministry of Health will be the executing agency for the Project (hereinafter referred to as “the Executing Agency”). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The organization chart(s) are shown in Annex 2.

5. Items requested by the Government of Kyrgyzstan

- 5-1. As a result of discussions, both sides confirmed that the items requested by the Government of Kyrgyzstan as shown in Annex 3
- 5-2. JICA will assess the feasibility of the above requested items through the survey and will report the findings to the Government of Japan. The final scope of the Project will be decided by the Government of Japan.
- 5-3. The Government of Kyrgyzstan shall submit an official request to the Government of Japan through a diplomatic channel before the appraisal of the Project by end of November.

6. Procedures and Basic Principles of Japanese Grant

- 6-1. The Kyrgyzstan side agreed that the procedures and basic principles and basic

principles of Japanese Grant (hereinafter referred to as “the Grant”) as described in Annex 4 shall be applied to the Project.

As for the monitoring of the implementation of the Project, JICA requires Kyrgyzstan side to submit the Project Monitoring Report, the form of which is attached as Annex 5.

6-2. The Kyrgyzstan side agreed to take the necessary measures, as described in Annex 6, for smooth implementation of the Project. The contents of the Annex 6 will be elaborated and refined during the Preparatory Survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report.

The contents of Annex 6 will be updated as the Preparatory Survey progresses, and eventually, will be used as an attachment to the Grant Agreement.

7. Schedule of the Survey

7-1. JICA will prepare a draft Preparatory Survey Report in Russian and dispatch a mission to Kyrgyzstan in order to explain its contents around February, 2022.

7-2. An official request to the Government of Japan will be submitted by end of November, 2021.

7-4. If the contents of the draft Preparatory Survey Report is accepted and the undertakings for the Project are fully agreed by the Kyrgyzstan side, JICA will finalize the Preparatory Survey Report and send it to Kyrgyzstan around June, 2022.

7-5. The above schedule is tentative and subject to change.

8. Environmental and Social Considerations

8-1. The Kyrgyzstan side confirmed to give due environmental and social considerations before and during implementation, and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (April, 2010).

8-2. The Project is categorized as “C” from the following considerations: Not located in a sensitive area, nor has it sensitive characteristics, nor falls it into sensitive sectors under the Guidelines, and its potential adverse impacts on the environment are not likely to be significant.

9. Other Relevant Issues

9-1 Maintenance on Equipment to be procured

(1) Allocation of Budget and Human Resources

Kyrgyzstan side agreed to secure and allocate the necessary staff and budget to operate and maintain the medical equipment procured under the Project properly and effectively.

Kyrgyzstan side will coordinate possibility of ensuring necessary budget from income created by using provided equipment by the Grant. Besides, Kyrgyzstan side agreed to place an engineer per 100 beds in each targeted hospitals based on the national law.

(2) Maintenance Services

The team explained that the importance of the routine maintenance and periodical maintenance service of some major medical equipment. Keeping this in view, both sides agreed to consider inclusion of maintenance service contract to the major medical equipment that need frequent maintenance into the project, whose appropriate contract years will be investigated during the Preparatory Survey.

Kyrgyzstan side also agreed to secure maintenance cost after expiring maintenance contract and/or manufacture guarantee to be covered by the Grant. The period of maintenance contract and/or manufacture guarantee depends on the equipment, therefore, JICA will inform the result of the maintenance service of each equipment to be covered by the Grant at the mission dispatched for explanation of the Draft Preparatory Survey Report.

9-2 Precondition of Installment of Equipment

Kyrgyzstan side agreed to take necessary measures of removal of the existing equipment for securing the space before installment of the equipment procured by the Grant.

9-3 Soft Components

Kyrgyzstan side took note of the importance of operational training for equipment and requested to consider incorporating soft components into the Project. The team agreed to plan to include operational trainings as soft components. The concrete content would be considered continuously.

9-4 Registration of the equipment

Kyrgyzstan side agreed to take measures such as facilitating procedures of registration of the equipment to be procured, in case the expected model of the Equipment have not been registered based on the common rule of Eurasian Economic Union.

9-5 Gender Mainstreaming

Both sides confirmed that following gender elements shall be duly reflected in the scope of Preparatory Survey.

- (a) Collection of information and gender disaggregated data for assessment of gender needs. Especially, conduct gender-specific needs survey since there might be differences regarding disease burden, medical examination rate, and so on.
- (b) Regarding beneficiaries of the project, revealing benefits for women by examining gender statistics, and so on.
- (c) Giving Kyrgyzstan side suggestions on gender-specific needs and gender considerations related to equipment plan.

Annex 1 Project Site

Annex 2 Organization Chart

Annex 3 Equipment List

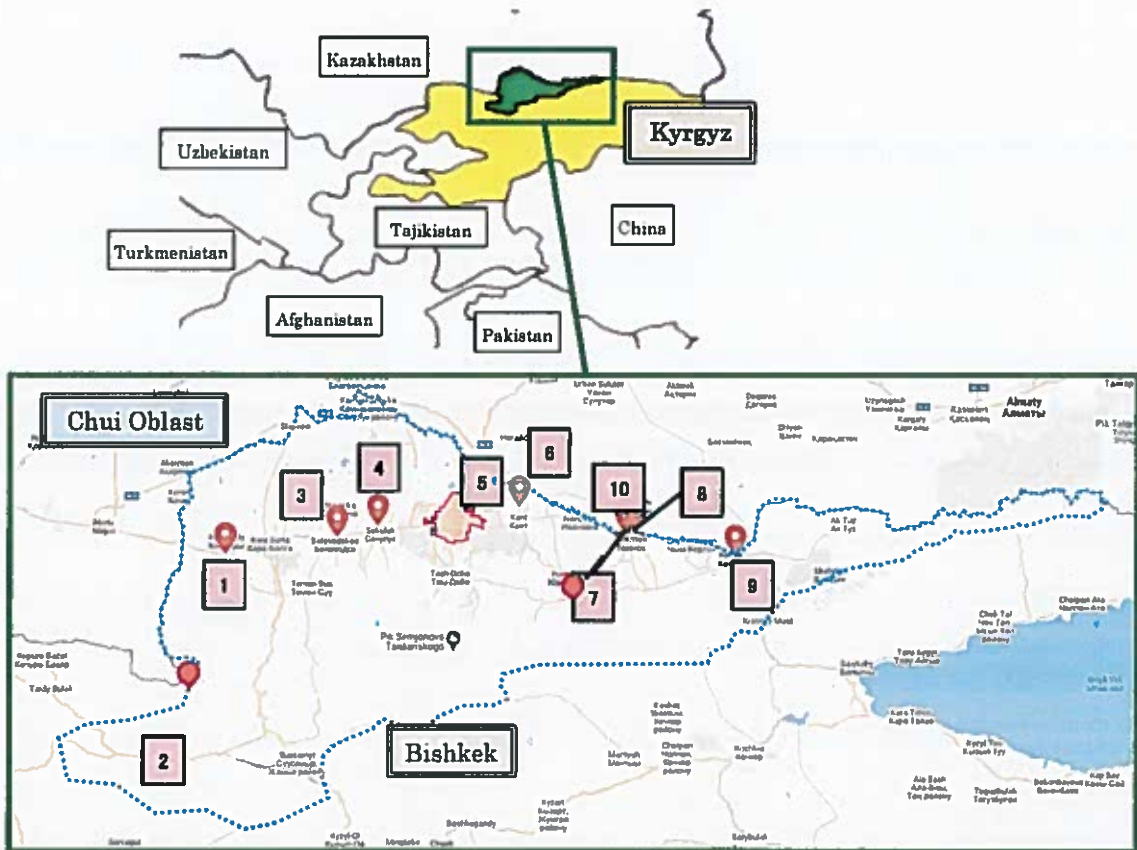
Annex 4 Japanese Grant

Annex 5 Project Monitoring Report (template)

Annex 6 Major Undertakings to be taken by the Government of Kyrgyzstan

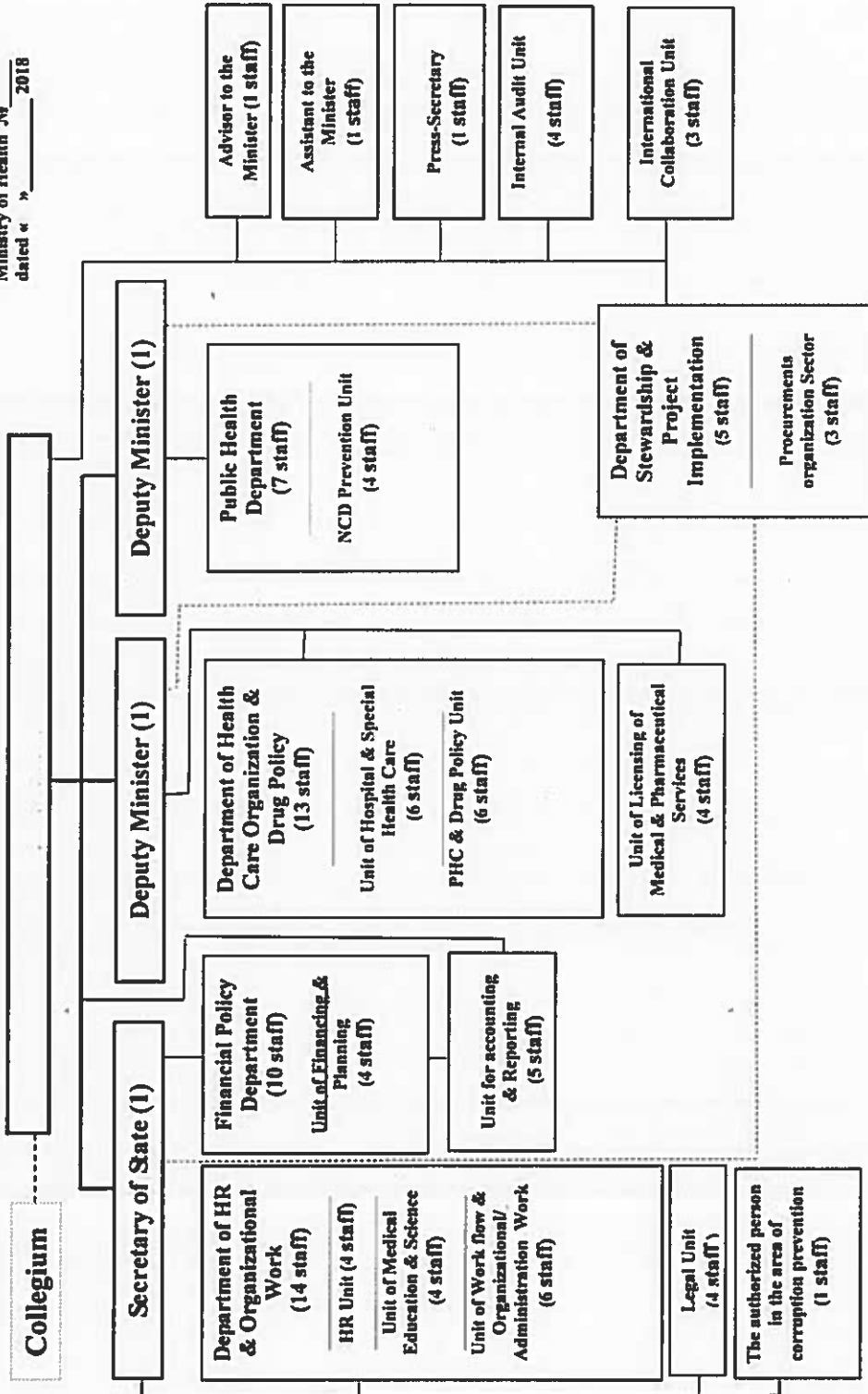


Annex 1 Project Site



No.	Hospital Name
1	Jaiyl Territorial Hospital
2	Panfilov General Practice Center
3	Moscow Territorial Hospital
4	Sokuluk Territorial Hospital
5	Merged Chui Regional Hospital
6	Issyk-Ata Territorial Hospital
7	Chui District Territorial Hospital
8	Tokmok Town Territorial Hospital
9	Kemin Territorial Hospital
10	Ivanovka Branch of Ivanovka Territorial Hospital

Organogram of the Ministry of Health of the Kyrgyz Republic (75 staff)



ky

of

Annex 3 Equipment List

No.	品名 器材名	Equipment name	Quantity	Priority	1 Jajil Territorial Hospital	2 Tanjung General Practice Clinic	3 Mecor Territorial Hospital	4 Sabalak Territorial Hospital	5 Merged Chuy Regional Hospital	6 Isay-Mia Territorial Hospital	7 Chuy District Territorial Hospital	8 Tobmok Town Territorial Hospital	9 Kemin Territorial Hospital	10 Territorial Hospital
1	一般X線撮影装置 (透視行き)	General X-ray machine with Fluoroscopy	1	A	1									
2	一般X線撮影装置	General X-ray machine	9	A		1	2	1	1	1	1	1		
3	移動式X線撮影装置	Mobile X-ray machine	8	A	1	1	1	1	1	1	1	1		
4	超音波診断装置	Ultrasound	22	A	6	1	2	3	2	2	2	2	1	
5	モバイル超音波診断装置	Mobile ultrasound	8	A	1		1	5		1				
6	ECG	ECG monitor	14	A				2	2	3	3	2	2	
7	人工呼吸器	Ventilator	25	A	1	2	2	5	2	1	1	4	2	
8	手術台	Operation lamp	18	A	4		2	3	2	1	3	1	2	
9	手術台 (マニュアル)	Operation table	16	A	3		2	5	2		3	1	1	
10	移動式吸引機	Mobile suction pump	8	A				2		2		2	2	
11	患者モニター	Patient monitor	55	A		10	9		1	7	4	2	2	
12	高圧酸素濃縮機 (大)	Autoclave (Large)	9	B	2			2	2		3			
13	高圧酸素濃縮機 (小)	Autoclave (Small)	13	B	4		1		2	2		2	2	
14	生化学分析装置	Biochemistry analyzer	6	A			1	2		1	1	1	1	
15	遠心分離機	Centrifuge	4	A			1					2	1	
16	血液分析装置	Hematology analyzer	4	A			1				1	1	1	
17	CR & イメージライター	CR and image writer	10	A	1	1		1	1	1	1	1	1	
18	手術器具 (大)	Surgical instruments set (Major)	8	B	2			1	1	1	1	1	1	
19	手術器具 (小)	Surgical instruments set (Minor)	5	B	2			1	1	1	2	2	2	
20	上部内視鏡	Gastrofiberscope	8	A	1	1	1	2	2					
21	下部内視鏡	Colombifiberscope	2	A	1				1					
22	経管支内視鏡	Bronchofiberscope	2	A	1				1					
23	電気メス	Electrical coagulator	19	A			1	7	2	2	3	1	1	
24	C-arm	C-arm	2	B				1			1			

JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA

(2) Appraisal

-Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

-The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as "the G/A")

-Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as "the B/A")

-Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant

Construction works/procurement

-Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

-Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of



relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)"

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.

b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the

Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

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Project Monitoring Report
on
Project Name
Grant Agreement No. XXXXXXXX
20XX, Month

Organizational Information

Signer of the G/A (Recipient)	_____ Person in Charge (Designation) _____ Contacts _____ <u>Address:</u> _____ <u>Phone/FAX:</u> _____ <u>Email:</u> _____
Executing Agency	_____ Person in Charge (Designation) _____ Contacts _____ <u>Address:</u> _____ <u>Phone/FAX:</u> _____ <u>Email:</u> _____
Line Ministry	_____ Person in Charge (Designation) _____ Contacts _____ <u>Address:</u> _____ <u>Phone/FAX:</u> _____ <u>Email:</u> _____

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____

1: Project Description

1-1 Project Objective

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1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

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1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components	Original <i>(proposed in the outline design)</i>	Actual
1.		

2-2 Scope of the work

Components	Original* <i>(proposed in the outline design)</i>	Actual*
1.		

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Reasons for modification of scope (if any).

(PMR)

[Handwritten signature]

2-3 Implementation Schedule

Items	Original		Actual
	(proposed in the outline design)	(at the time of signing the Grant Agreement)	

Reasons for any changes of the schedule, and their effects on the project (if any)

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2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations
 See Attachment 2.

2-4-2 Activities
 See Attachment 3.

2-4-3 Report on RD
 See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant(Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original (proposed in the outline design)	Actual (in case of any modification)	Original ^(1,2) (proposed in the outline design)	Actual
	1.			
Total				

Note: 1) Date of estimation:
 2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (1,000 Taka)	
	Original (proposed in the outline design)	Actual (in case of any modification)	Original ^(1,2) (proposed in the outline design)	Actual
	1.			

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original (at the time of outline design) name: role: financial situation: institutional and organizational arrangement (organogram): human resources (number and ability of staff):
Actual (PMR)

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

Original (at the time of outline design)
Actual (PMR)

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original (at the time of outline design)

Actual (PMR)

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (at the time of outline design)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

	Contingency Plan (if applicable):
Actual Situation and Countermeasures	
(PMR)	

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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Attachment

1. Project Location Map
 2. Specific obligations of the Recipient which will not be funded with the Grant
 3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
- Consultant Member List
 - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
 5. Environmental Monitoring Form / Social Monitoring Form
 6. Monitoring sheet on price of specified materials (Quarterly)
 7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
 8. Pictures (by JPEG style by CD-R) (PMR (final) only)
 9. Equipment List (PMR (final) only)
 10. Drawing (PMR (final) only)
 11. Report on RD (After project)

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Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment	
					Price (Decreased) E=C-D	Price (Increased) F=C+D
Item 1	●●t	●	●	●	●	●
Item 2	●●t	●	●	●		
Item 3						
Item 4						
Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials	1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
Item 1	●	●	●			
Item 2						
Item 3						
Item 4						
Item 5						

(3) Summary of Discussion with Contractor (if necessary)

Major Undertakings to be taken by the Government of the Kyrgyz Republic

1. Specific obligations of the Government of the Kyrgyz Republic which will not be funded with the Grant**(1) Before the Bidding**

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	MOF		
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	MOH/MOF		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOH/MOF		
	2) Payment commission for A/P	every payment	MOH/MOF		
10	To submit Project Monitoring Report (with the result of Detailed Design)	before preparation of the bidding documents	MOH		

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	MOH/MOF		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A				
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOH/MOF		
	2) Payment commission for A/P	every payment	MOH/MOF		
3	to ensure prompt customs clearance and to assist the Supplier(s) with internal transportation in the country of the Recipient	during the Project	MOH		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	MOH		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted/	during the Project	MOH		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	MOH		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	MOH		
8	To submit Project Monitoring Report after each work under the contract(s) such as shipping, hand over, installation and operational training	within 1 month after completion of each work	MOH		
	To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	MOH		
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	MOH		
10	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s)				
	1) Electricity The distributing line to the site	before start of the construction	MOH/Target hospitals		
	2) Water Supply The city water distribution main to the site	before start of the construction	MOH/Target hospitals		
	3) Drainage The city drainage main (for storm, sewer and others) to the site	6 months before completion of the construction	MOH/Target hospitals		
12	To take necessary measures of disposal of the equipment which are precondition of installment of new equipment.	before start of the construction	MOH/Target hospitals		
13	To ensure the safety of persons engaged in the implementation of the Project	during the Project	MOH		

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
3	To maintain and use properly and effectively equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the Procurement	MOH/Target Hospitals		

2. Other obligations of the Government of Kyrgyz Republic funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	To provide equipment 1) To conduct the following transportation a) Marin (Air) transportation of the products from Japan to the country of the Recipient b) Internal transportation from the port of disembarkation to the project site		/
	2) To provide equipment with installation and commissioning		
2	To implement detailed design, bidding support and procurement supervision (Consulting Service)		
	Total		XXX

*The Amount is provisional. This is subject to the approval of the Government of Japan.

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Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
 (Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

**Minutes of Discussions
on the Preparatory Survey for the Project for
Improvement of Medical Equipment in Bishkek City and Chui Oblast**

With reference to the minutes of discussions signed between Ministry of Health of the Kyrgyz Republic and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on 20th October 2021 and in response to the request from the Cabinet of Ministers of the Kyrgyz Republic dated 18th January 2022, JICA dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for Improvement of Medical Equipment in Bishkek City and Chui Oblast (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed on the main items described in the attached sheets.

Bishkek, 18th March 2022



Mr. Tatsuya Ashida
Director
Preparatory Survey Team
Japan International Cooperation Agency
Japan



Mr. Rakhmatulaev Jalalidin
Deputy Minister
Ministry of Health
Kyrgyz Republic

ATTACHMENT

1. Objective of the Project

The objective of the Project is to strengthen diagnosis and treatment capacity by providing medical equipment for diagnosis and treatment of Non-communicable diseases to healthcare organizations in Bishkek city and Chui oblast, which is a base of medical service provision, there by contributes to enhancing the quality of health care services

2. Title of the Project

Both sides confirmed the appropriate title of the Project is “The Project for Improvement of Medical Equipment in Bishkek City and Chui Oblast”. The title will be decided by Government of Japan through the official approval process.

3. Project site

Both sides confirmed that the sites of the Project are in Bishkek and Chui oblast, the Kyrgyz Republic, which is shown in Annex 1.

4. Responsible authority for the Project

Both sides confirmed the authorities responsible for the Project are as follows:

- 4-1. The Ministry of Health of the Kyrgyz Republic will be the executing agency for the Project (hereinafter referred to as “the Executing Agency”). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities properly and on time. The organization chart(s) are shown in Annex 2.

5. Contents of the Draft Report

After the explanation of the contents of the Draft Report by the Team, the Kyrgyz side agreed to its contents. JICA will finalize the Preparatory Survey Report based on the confirmed items. The report will be sent to the Kyrgyz side around July 2022.

6. Cost estimate

Both sides confirmed that the cost estimate explained by the Team is provisional and will be examined further by the Government of Japan for its approval.



7. Confidentiality of the cost estimate and technical specifications

Both sides confirmed that the cost estimate and technical specifications of the Project should never be disclosed to any third parties until all the contracts under the Project are concluded.

8. Procedures and Basic Principles of Japanese Grant

Kyrgyz side agreed that the procedures and basic principles of Japanese Grant (hereinafter referred to as “the Grant”) as described in Annex 3 shall be applied to the Project. In addition, Kyrgyz side agreed to take necessary measures according to the procedures.

9. Timeline for the project implementation

The Team explained to Kyrgyz side that the expected timeline for the project implementation is as attached in Annex 5.

10. Expected outcomes and indicators

Both sides agreed that key indicators for expected outcomes are as follows. Kyrgyz side will be responsible for the achievement of agreed key indicators targeted in year 2027 and shall monitor the progress for Ex-Post Evaluation based on those indicators.

[Quantitative indicators]

Index(per year)	Baseline (2020)	Target (2027)
Number of inpatients and outpatients	77,137	92,000
Number of general radiographic X-ray photography	77,089	85,000
Number of upper gastrointestinal endoscopy examination	1,680	4,560

※These numbers are total of the target hospitals.

[Qualitative indicators]

- ① Patient satisfaction at the target hospitals is improved.
- ② The quality of medical services at the target hospitals is improved

11. Ex-Post Evaluation

JICA will conduct ex-post evaluation after three (3) years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness,

Efficiency, Impact, and Sustainability). The result of the evaluation will be publicized. Kyrgyz side is required to provide necessary support for the data collection.

12. Undertakings of the Project

Both sides confirmed the undertakings of the Project as described in Annex 7. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in 1. (2) No.5 of Annex 7, both sides confirmed that such customs duties, internal taxes and other fiscal levies, which shall be clarified in the bid documents by the Ministry of Health of the Kyrgyz Republic during the implementation stage of the Project.

Kyrgyz side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Draft Outline Design level. More accurate costs will be calculated at the Detailed Design stage.

Both sides also confirmed that the Annex 7 will be used as an attachment of G/A.

13. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 6. The timing of submission of the PMR is described in Annex 7.

14. Project completion

Both sides confirmed that the project completes when all equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly by the Executing Agency, but in any event not later than six months after completion of the Project.

15. General Issues

15-1 Environmental and Social Considerations

The Team explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as "the Guidelines") is applicable for the Project. The Project is categorized as C because the Project is likely to have minimal adverse impact on the environment under the Guidelines.

16. Other Relevant Issues

16-1 Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey. The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

16-2 Maintenance on the Equipment to be procured

(1) Allocation of Budget and Human Resources

Kyrgyz side agreed to secure and allocate the necessary staff and budget to operate and maintain the medical equipment procured under the Project properly and effectively.

Kyrgyz side will coordinate possibility of ensuring necessary budget from income created by using provided equipment by the Grant. Besides, Kyrgyz side agreed to place an medical technician per 100 beds in each targeted hospital based on the Article 1.1.10 of the order of the Ministry of Health of the Kyrgyz Republic No 1217 dated 3 September 2021 "On approval of the recommended staff allocation: Administrative, managerial and housekeeping personnel of health care organizations of the Kyrgyz Republic".

(2) Maintenance Services

The team explained that the importance of the routine maintenance and periodical maintenance service of some major medical equipment. Keeping this in view, both sides agreed to consider inclusion of two years maintenance service contract to the major medical equipment that need frequent maintenance into the project.

Both side confirmed that a two-year on-call service and regular maintenance service from the expiration of the one-year manufacturer's guarantee period will be secured at the expense of the Japanese side. The team explained that at the time of delivery, the manufacturer's agency technician will provide initial operation guidance and operational guidance to maintenance engineers and end users such as doctors, nurses, and laboratory technicians. Additionally, under the two-year maintenance service contract, regular inspections will be carried out every three months, and at the same time, inspection items will be confirmed for daily inspections and practical inspection guidance will be provided to improve the target hospitals' maintenance and management capacity of the equipment.

Kyrgyz side also agreed to secure maintenance cost based on the explanation by the team after expiring maintenance contract and/or manufacture guarantee to be covered by the Grant.

(3) The maintenance system in the target hospitals

Both side confirmed that since the Ministry of Health of the Kyrgyz Republic does not have a department to maintain medical equipment and each hospital does not have an operation and maintenance department, daily maintenance of procured equipment is carried out by the Ministry of Health of the Kyrgyz Republic and the target hospitals with the support of private maintenance companies and local agents.

Kyrgyz side took note of the importance of equipment maintenance and agreed to assign a person who takes charge of the maintenance of the equipment in the target hospitals.

16-4 Precondition of Installment of Equipment

Kyrgyz side agreed to take necessary measures of removal of the existing equipment for securing the space and implement utility construction before installment of the equipment procured by the Grant.

In addition, both side confirmed that assuming that PACS (Picture Archiving and Communication Systems) will be introduced by the E-health center, it is planned that the specification of diagnostic imaging apparatus to be procured will be compatible with the PACS for the sake of sharing and managing the diagnostic images as an electronic data, so Kyrgyz side need to support its introduction.

16-5 Registration of the equipment

Kyrgyz side agreed to take measures such as facilitating and simplifying procedures of registration of the equipment to be procured, in case the expected model of the equipment have not been registered based on the common rule of Eurasian Economic Union which is planned to be introduced in January 2023.

Additionally, Kyrgyz side will coordinate to enact a legislation which exempt the procedures of registration for the granted equipment by December 2022.

16-6 Sharing information of equipment between Kyrgyz side including the target hospitals

Kyrgyz side agreed to share information of the type and quantity of equipment procured by Grant based on Annex 4 to avoid overlap of equipment procurements in each target hospital.

Annex 1 Project Site

Annex 2 Organization Chart

Annex 3 Japanese Grant

Annex 4 Equipment List

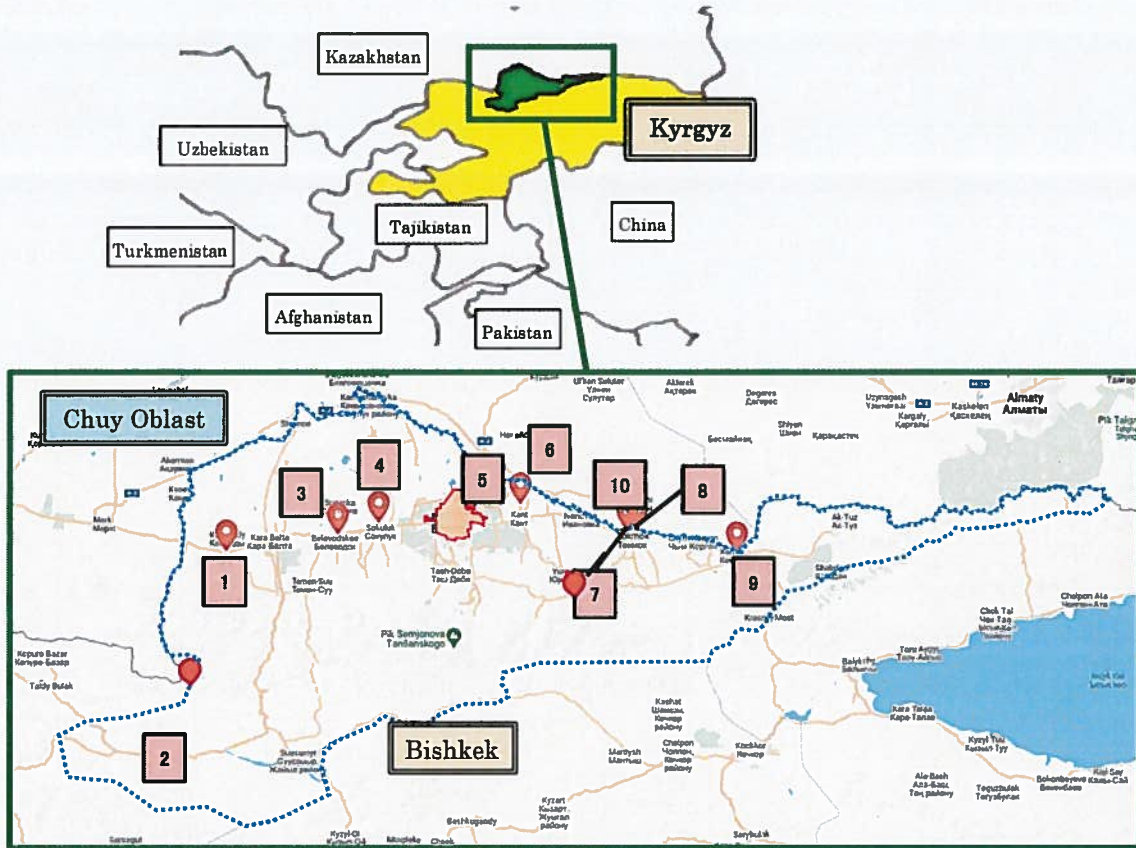
Annex 5 Project Implementation Schedule (tentative)

Annex 6 Project Monitoring Report (template)

Annex 7 Major Undertakings to be taken by the Cabinet of Ministers of the Kyrgyz Republic

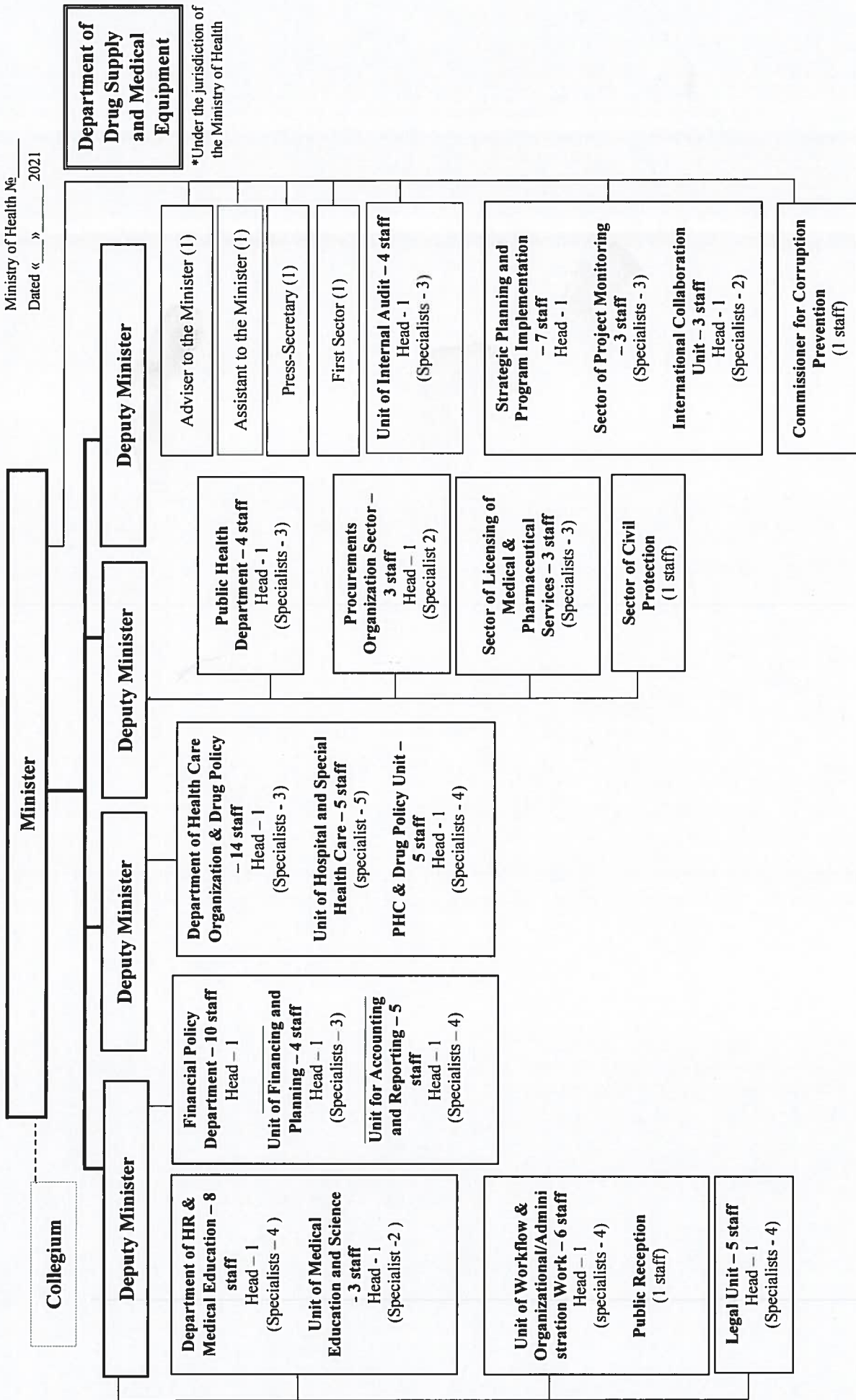


Annex 1 Project Site



No.	Hospital Name
1	Jaiyl District General Practice Center
2	Panfilov District General Practice Center
3	Moscow District General Practice Center
4	Sokuluk District General Practice Center
5	Chuy Regional Merged Hospital
6	Issyk-Ata General Practice Center
7	Chuy District General Practice Center
8	Tokmok Town General Practice Center
9	Kemin District General Practice Center
10	Ivanovka Branch of Ivanovka Territorial Hospital

Organogram of the Ministry of Health of the Kyrgyz Republic (75 staff)



JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as “the Recipient”) to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as “Project Grants”).

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See “PROCEDURES OF JAPANESE GRANT” for details):

(1) Preparation

- The Preparatory Survey (hereinafter referred to as “the Survey”) conducted by JICA

(2) Appraisal

- Appraisal by the government of Japan (hereinafter referred to as “GOJ”) and JICA, and Approval by the Japanese Cabinet

(3) Implementation

Exchange of Notes

- The Notes exchanged between the GOJ and the government of the Recipient

Grant Agreement (hereinafter referred to as “the G/A”)

- Agreement concluded between JICA and the Recipient

Banking Arrangement (hereinafter referred to as “the B/A”)

- Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as “the Bank”) to receive the grant

Construction works/procurement

- Implementation of the project (hereinafter referred to as “the Project”) on the basis of the G/A

(4) Ex-post Monitoring and Evaluation

- Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See “Financial Flow of Japanese Grant (A/P Type)” for details)

- a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.
- b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the “Meeting”) will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the

Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as followings:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.



No.	Equipment list	Наименование оборудования	Priority	Quantity	1	2	3	4	5	6	7	8	9	10
1	Спирит X-ray machine	Рентгеноаппарат стационарный	A	8	1	1	1	1	1	1	1	1	1	1
2	Mobile X-ray machine	Передвижной рентгеноаппарат	A	9	1	1	1	2	1	1	1	1	1	1
3	Ultrasound	Стационарный УЗИ аппарат	A	13	2	1	2	1	2	1	1	1	1	1
4	Mobile ultrasound	Переносной УЗИ аппарат	A	6	1			1	2		1		1	
5	ECC monitor	ЭКГ	A	6					2		2	1		1
6	Ventilator	Искусственный Дыхательный аппарат	A	21	1	4	2	2	3	2	3	2	2	2
7	Operation lamp	Операционный лампа	A	14	2		2	1	2	2	1	2	1	1
8	Operation table	Операционный стол	A	13	3		2	1	2	2	2	2	2	1
9	Mobile suction pump	Мобильный отсос	A	8			2	2	2			2	1	1
10	Patient monitor	Монитор пациента	A	29		5	6	5	1	6	2	2	2	2
13	Anesthesia (Small)	Анестезия (маленький)	B	17	3		1	1	2	3	1	2	2	2
14	Biochemistry analyzer	Биохимический анализатор	A	6			1	1		1	1	1	1	1
15	Centrifuge	Центрифуга	A	6			1	1			1	1	2	1
16	Hematology analyzer	Гематологический анализатор	A	5			1	1			1	1	1	1
17	CR and image writer	Оцифровка и принтер (без цифрового рентгеноаппарата)	A	9	1	1	1	1	1	1	1	1	1	1
18	Surgical instruments set (Major)	Набор хирургических инструментов (большой)	B	5	1				1	1	1	1	1	1
20	Gastrofibroscope	Гастрофиброскоп	A	6	1	1		1	1	1	1	1	1	1
21	Colonofiberscope	Колонифиброскоп	A	2	1									
22	Proctofiberscope	Проктофиброскоп	A	2	1									
23	Electrical coagulator	Электрический коагулятор	A	14		1	1	3	2	2	2	2	2	1

Project Implementation Schedule (Tentative)

Year	1st	2nd	3rd	4th	5th
① International Agreement	■				
② Detailed Design	■				
③ Procurement		■			
④ Defect Inspection			■		
⑤ Maintenance Contract				■	■

▲...Inspection and hand over

Project Monitoring Report
on
Project Name
Grant Agreement No. XXXXXXXX
20XX, Month

Organizational Information

Signer of the G/A (Recipient)	_____ Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____
Executing Agency	_____ Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____
Line Ministry	_____ Person in Charge (Designation) _____ Contacts _____ Address: _____ Phone/FAX: _____ Email: _____

General Information:

Project Title	
E/N	Signed date: Duration:
G/A	Signed date: Duration:
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____

1: Project Description

1-1 Project Objective

--

1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

--

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location

Components	Original <i>(proposed in the outline design)</i>	Actual
1.		

2-2 Scope of the work

Components	Original* <i>(proposed in the outline design)</i>	Actual*
1.		

Reasons for modification of scope (if any).

(PMR)

2-3 Implementation Schedule

Items	Original		Actual
	<i>(proposed in the outline design)</i>	<i>(at the time of signing the Grant Agreement)</i>	

Reasons for any changes of the schedule, and their effects on the project (if any)

--

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations

See Attachment 2.

2-4-2 Activities

See Attachment 3.

2-4-3 Report on RD

See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant(Confidential until the Bidding)

Components			Cost (Million Yen)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original ^{1),2)} <i>(proposed in the outline design)</i>	Actual
1.				
Total				

Note: 1) Date of estimation:
 2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components			Cost (1,000 Taka)	
	Original <i>(proposed in the outline design)</i>	Actual <i>(in case of any modification)</i>	Original ^{1),2)} <i>(proposed in the outline design)</i>	Actual
1.				

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original (at the time of outline design) name: role: financial situation: institutional and organizational arrangement (organogram): human resources (number and ability of staff):
Actual (PMR)

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

Original (at the time of outline design)
Actual (PMR)

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original (at the time of outline design)

Actual (PMR)

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (at the time of outline design)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

	Contingency Plan (if applicable):
Actual Situation and Countermeasures (PMR)	

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

--

5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

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5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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Attachment

1. Project Location Map
 2. Specific obligations of the Recipient which will not be funded with the Grant
 3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
- Consultant Member List
 - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
 5. Environmental Monitoring Form / Social Monitoring Form
 6. Monitoring sheet on price of specified materials (Quarterly)
 7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
 8. Pictures (by JPEG style by CD-R) (PMR (final) only)
 9. Equipment List (PMR (final) only)
 10. Drawing (PMR (final) only)
 11. Report on RD (After project)

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Items of Specified Materials	Initial Volume A	Initial Unit Price (¥) B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment	
					Price (Decreased) E=C-D	Price (Increased) F=C+D
Item 1	●●t	●	●	●	●	●
Item 2	●●t	●	●			
Item 3						
Item 4						
Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials	1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
Item 1	●	●	●			
Item 2						
Item 3						
Item 4						
Item 5						

(3) Summary of Discussion with Contractor (if necessary)

.

Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
 (Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction	(A/D%)	(B/D%)	(C/D%)	
Cost others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

Major Undertakings to be taken by the Government of Kyrgyz Republic

1. Specific obligations of the Government of Kyrgyz Republic which will not be funded with the Grant

(1) Before the Bidding

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open bank account for the Grant	within 1 month after the signing of the G/A	MOF		
2	To issue A/P to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract(s)	MOH/MOF		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A			9000	
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOH/MOF		
	2) Payment commission for A/P	every payment	MOH/MOF		
10	To submit Project Monitoring Report (with the result of Detailed Design)	before preparation of the bidding documents	MOH		

(B/A: Banking Arrangement, A/P: Authorization to pay, N/A: Not Applicable)

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(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier and the contractor	within 1 month after the signing of the contract(s)	MOH/MOF		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A			9000	
	1) Advising commission of A/P	within 1 month after the signing of the contract(s)	MOH/MOF		
	2) Payment commission for A/P	every payment	MOH/MOF		
3	To ensure prompt customs clearance and to assist the Supplier(s) with internal transportation in the country of the Recipient	during the Project	MOH/MOF		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	MOH/MOFA		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted.	during the Project	MOH/MOF/MOE		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	MOH/MOF		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	MOH		
8	To submit Project Monitoring Report				
	1) To submit Project Monitoring Report after each work under the contract(s) such as shipping, hand over, installation and operational training	within 1 month after completion of each work	MOH		
	2) To submit Project Monitoring Report (final) (including as-built drawings, equipment list, photographs, etc.)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	MOH		
9	To submit a report concerning completion of the Project	within 6 months after completion of the Project	MOH		
10	To assign a person who takes charge of the maintenance of the Equipment	during the Project	MOH		
11	To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Project outside the site(s)				
	1) Electricity The distributing line to the site	before start of the construction	MOH/Target hospitals		
	2) Water Supply The city water distribution main to the site	before start of the construction	MOH/Target hospitals		
	3) Drainage The city drainage main (for storm, sewer and others) to the site	6 months before completion of the construction	MOH/Target hospitals		
12	To take necessary measures of disposal of the equipment which are precondition of installment of new equipment.	before start of the construction	MOH/Target hospitals	1950	

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13	To ensure the safety of persons engaged in the implementation of the Project	during the Project	MOH		
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(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
3	To maintain and use properly and effectively equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the Procurement	MOH/Target Hospitals	Annual cost is 130,632 for first year, including cost of consumable and replacement items. Annual cost is 137,312 for second year and after, including cost of repairs, consumable and replacement items. Annual cost of maintenance service contract for forth year and after is as described in Draft Preparatory Survey Report.	

2. Other obligations of the Government of Kyrgyz Republic funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)*
1	To provide equipment 1) To conduct the following transportation a) Marin (Air) transportation of the products from Japan to the country of the Recipient b) Internal transportation from the port of disembarkation to the project site 2) To provide equipment with installation and commissioning		/
2	To implement detailed design, bidding support and procurement supervision (Consulting Service)		

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	Total		XXX
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*The Amount is provisional. This is subject to the approval of the Government of Japan.

以上



Appendix 5 Planned Equipment List of Each Hospital

No.	Equipment list	Priority	Quantity	1	2	3	4	5	6	7	8	9	10
				Jaiyl District General Practice Center	Panfilov District General Practice Center	Moscow District General Practice Center	Sokuluk District General Practice Center	Chui Regional Merged Hospital	Issyk-Ata District General Practice Center	Chui District General Practice Center	Tokmok Town General Practice Center	Kemin District General Practice Center	Ivanovka Village's Branch of Issyk-Ata General Practice Center
1	General X-ray machine	A	8	1	1	1	1	1	1	1			
2	Mobile X-ray machine	A	9	1	1		2	1		1	1	1	1
3	Ultrasound	A	13	2	1	2	1	2	1	1	1	1	1
4	Mobile ultrasound	A	6	1			1	2		1		1	
5	ECG monitor	A	6					2		2	1		1
6	Ventilator	A	21	1	4	2	2	3	2	3		2	2
7	Operation lamp	A	14	2		2	1	2	2	1	2	1	1
8	Operation table	A	13	3		2	1	2	2		2		1
9	Mobile suction pump	A	8			2	2			2	1		1
10	Patient monitor	A	29		5	6	5		1	6	2	2	2
13	Autoclave (Small)	B	17	3		1	1	2	3	1	2	2	2
14	Biochemistry analyzer	A	6			1	1		1		1	1	1
15	Centrifuge	A	6			1	1				1	2	1
16	Hematology analyzer	A	5			1	1				1	1	1
17	CR and image writer	A	9	1	1	1	1	1	1	1		1	1
18	Surgical instruments set (Major)	B	5	1				1		1	1	1	
20	Gastrofiberscope	A	6	1	1		1	1	1		1		
21	Colonofiberscope	A	2	1					1				
22	Bronchofiberscope	A	2	1							1		
23	Electrical coagulator	A	14		1	1	3	2	2	2	2	1	

Appendix 6 Evaluation Chart of Requested Equipment

Jaiyl District General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity
				①	②	③	④	⑤	⑥	⑦	Total		
1	General X-ray machine with Fluoroscopy	1	A	x	x	o	o	o	x	x	x	Planned as general X-ray machine	0
2	General X-ray machine	0	A	o	o	o	o	o	o	o	o	One unit is planned to be installed in the X-ray room	1
3	Mobile X-ray machine	1	A	o	o	o	o	o	o	o	o	One unit is planned to be installed in the X-ray room	1
4	Ultrasound	6	A	o	o	o	o	o	o	o	o	One unit each is planned to be installed in the reception of hospitalization and the department of gynecology	2
5	Mobile ultrasound	1	A	o	o	o	o	o	o	o	o	One unit is planned to be installed in the diagnostic imaging room	1
6	ECG monitor	—	—	—	—	—	—	—	—	—	—	—	—
7	Ventilator	1	A	o	o	o	o	o	o	o	o	One unit is planned to be installed in the operation room	1
8	Operation lamp	4	A	o	o	o	o	o	o	o	o	Quantity was adjusted due to the budgetary reason. One unit each is planned to be installed in the department of gynecology and surgical department	2
9	Operation table	3	A	o	o	o	o	o	o	o	o	One unit each is planned to be installed for the department of gynecology, urology and surgery	3
10	Mobile suction pump	—	—	—	—	—	—	—	—	—	—	—	—
11	Patient monitor	—	—	—	—	—	—	—	—	—	—	—	—
12	Autoclave (Large)	2	B	o	o	o	o	o	o	o	o	Deleted due to duplication with other donor support	0
13	Autoclave (Small)	4	B	o	o	o	o	o	o	o	o	Quantity was adjusted due to a purchase plan by the hospital budget. Planned to be installed in the clinical laboratory	3
14	Biochemistry analyzer	—	—	—	—	—	—	—	—	—	—	—	—
15	Centrifuge	—	—	—	—	—	—	—	—	—	—	—	—
16	Hematology analyzer	—	—	—	—	—	—	—	—	—	—	—	—
17	CR and image writer	1	A	o	o	o	o	o	o	o	o	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	2	B	o	o	o	o	o	o	o	o	Quantity was adjusted due to the budgetary reason. One unit is planned to be installed in the operation room	1
19	Surgical instruments set (Minor)	2	B	o	o	o	o	o	o	o	o	Deleted due to the budgetary reason	0
20	Gastrofiberscope	1	A	o	o	o	o	o	o	o	o	One unit is planned to be installed in the endoscopy room	1
21	Colonofiberscope	1	A	o	o	o	o	o	o	o	o	One unit is planned to be installed in the endoscopy room	1
22	Bronchofiberscope	1	A	o	o	o	o	o	o	o	o	One unit is planned to be installed in the endoscopy room	1
23	Electrical coagulator	—	—	—	—	—	—	—	—	—	—	—	—
24	C-arm	—	—	—	—	—	—	—	—	—	—	—	—

Panfilov District General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity	
				①	②	③	④	⑤	⑥	⑦	Total			
1	General X-ray machine with Fluoroscopy	–	–	–	–	–	–	–	–	–	–	–	–	
2	General X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
3	Mobile X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the surgical department	1
4	Ultrasound	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the department of internal medicine (ultrasound room).	1
5	Mobile ultrasound	–	–	–	–	–	–	–	–	–	–	–	–	
6	ECG monitor	–	–	–	–	–	–	–	–	–	–	–	–	
7	Ventilator	2	A	○	○	○	○	○	○	○	○	○	Two each are planned to be installed in ICU and surgical department	4
8	Operation lamp	–	–	–	–	–	–	–	–	–	–	–	–	
9	Operation table	–	–	–	–	–	–	–	–	–	–	–	–	
10	Mobile suction pump	–	–	–	–	–	–	–	–	–	–	–	–	
11	Patient monitor	20	A	○	○	○	○	○	○	○	○	○	Three units are planned to be installed in the surgical department and two units in ICU	5
12	Autoclave (Large)	–	–	–	–	–	–	–	–	–	–	–	–	
13	Autoclave (Small)	–	–	–	–	–	–	–	–	–	–	–	–	
14	Biochemistry analyzer	–	–	–	–	–	–	–	–	–	–	–	–	
15	Centrifuge	–	–	–	–	–	–	–	–	–	–	–	–	
16	Hematology analyzer	–	–	–	–	–	–	–	–	–	–	–	–	
17	CR and image writer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	–	–	–	–	–	–	–	–	–	–	–	–	
19	Surgical instruments set (Minor)	–	–	–	–	–	–	–	–	–	–	–	–	
20	Gastrofiberscope	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the endoscopy room	1
21	Colonofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	
22	Bronchofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	
23	Electrical coagulator	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
24	C-arm	–	–	–	–	–	–	–	–	–	–	–	–	

Moscow District General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity	
				①	②	③	④	⑤	⑥	⑦	Total			
1	General X-ray machine with Fluoroscopy	–	–	–	–	–	–	–	–	–	–	–	–	
2	General X-ray machine	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
3	Mobile X-ray machine	1	A	○	○	○	○	○	○	○	○	○	Deleted due to procurement by the hospital budget	0
4	Ultrasound	2	A	○	○	○	○	○	○	○	○	○	One unit each is planned to be installed in the reception of hospitalization and the reception of outpatient	2
5	Mobile ultrasound	1	A	○	○	○	○	○	○	○	○	○	Deleted due to procurement by the hospital budget	0
6	ECG monitor	–	–	–	–	–	–	–	–	–	–	–	–	
7	Ventilator	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms	2
8	Operation lamp	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms	2
9	Operation table	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms	2
10	Mobile suction pump	0	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms	2
11	Patient monitor	10	A	○	○	○	○	○	○	○	○	○	Four units are planned to be installed in ICU and two for the operation rooms	6
12	Autoclave (Large)	–	–	–	–	–	–	–	–	–	–	–	–	
13	Autoclave (Small)	0	B	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in CSSD	1
14	Biochemistry analyzer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
15	Centrifuge	0	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
16	Hematology analyzer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
17	CR and image writer	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	–	–	–	–	–	–	–	–	–	–	–	–	
19	Surgical instruments set (Minor)	–	–	–	–	–	–	–	–	–	–	–	–	
20	Gastrofiberscope	1	A	○	○	○	○	○	○	○	○	×	Deleted due to procurement by the hospital budget	0
21	Colonofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	
22	Bronchofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	
23	Electrical coagulator	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
24	C-arm	–	–	–	–	–	–	–	–	–	–	–	–	

Sokuluk District General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity	
				①	②	③	④	⑤	⑥	⑦	Total			
1	General X-ray machine with Fluoroscopy	–	–	–	–	–	–	–	–	–	–	–	–	–
2	General X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
3	Mobile X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit each is planned to be installed in the traumatology department and ICU	2
4	Ultrasound	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the reception of hospitalization	1
5	Mobile ultrasound	0	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in ICU	1
6	ECG monitor	2	A	○	○	○	○	○	○	○	○	○	Deleted due to procurement by the hospital budget	0
7	Ventilator	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be procured in the operation rooms	2
8	Operation lamp	0	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
9	Operation table	0	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
10	Mobile suction pump	0	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms	2
11	Patient monitor	9	A	○	○	○	○	○	○	○	○	○	Three units are planned to be installed in the operation rooms and two units in the department of cardiac surgery	5
12	Autoclave (Large)	–	–	–	–	–	–	–	–	–	–	–	–	–
13	Autoclave (Small)	1	B	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in CSSD	1
14	Biochemistry analyzer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
15	Centrifuge	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
16	Hematology analyzer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
17	CR and image writer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	–	–	–	–	–	–	–	–	–	–	–	–	–
19	Surgical instruments set (Minor)	–	–	–	–	–	–	–	–	–	–	–	–	–
20	Gastrofiberscope	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the endoscopy room	1
21	Colonofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	–
22	Bronchofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	–
23	Electrical coagulator	3	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms and 1 unit in the ICU operation room	3
24	C-arm	–	–	–	–	–	–	–	–	–	–	–	–	–

Chui Regional Merged Hospital

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity	
				①	②	③	④	⑤	⑥	⑦	Total			
1	General X-ray machine with Fluoroscopy	—	—	—	—	—	—	—	—	—	—	—	—	
2	General X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
3	Mobile X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
4	Ultrasound	3	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the outpatient laboratory and one unit in the department of cardiac surgery	2
5	Mobile ultrasound	5	A	○	○	○	○	○	○	○	○	○	One unit each is planned to be installed in the operation room and ICU	2
6	ECG monitor	2	A	○	○	○	○	○	○	○	○	○	One unit each is planned to be installed in the departments of cardiac surgery and neurology	2
7	Ventilator	5	A	○	○	○	○	○	○	○	○	○	Three units are planned to be installed in ICU	3
8	Operation lamp	3	A	○	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason. Two units are planned to be installed in the operation room of surgical department	2
9	Operation table	5	A	○	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason. Two units are planned to be installed in the operation room of surgical department	2
10	Mobile suction pump	2	A	○	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason.	0
11	Patient monitor	—	—	—	—	—	—	—	—	—	—	—	—	
12	Autoclave (Large)	2	B	○	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason.	0
13	Autoclave (Small)	2	B	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in CSSD	2
14	Biochemistry analyzer	—	—	—	—	—	—	—	—	—	—	—	—	
15	Centrifuge	—	—	—	—	—	—	—	—	—	—	—	—	
16	Hematology analyzer	—	—	—	—	—	—	—	—	—	—	—	—	
17	CR and image writer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	1	B	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
19	Surgical instruments set (Minor)	—	—	—	—	—	—	—	—	—	—	—	—	
20	Gastrofiberscope	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the endoscopy room	1
21	Colonofiberscope	—	—	—	—	—	—	—	—	—	—	—	—	
22	Bronchofiberscope	—	—	—	—	—	—	—	—	—	—	—	—	
23	Electrical coagulator	7	A	○	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason. Two units are planned to be installed in the operation room of surgical department	2
24	C-arm	1	B	○	○	○	○	○	○	○	○	○	Deleted due to the budgetary reason	0

Issyk-Ata District General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity	
				①	②	③	④	⑤	⑥	⑦	Total			
1	General X-ray machine with Fluoroscopy	—	—	—	—	—	—	—	—	—	—	—	—	
2	General X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
3	Mobile X-ray machine	—	—	—	—	—	—	—	—	—	—	—	—	
4	Ultrasound	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in ultrasound diagnostic room	1
5	Mobile ultrasound	—	—	—	—	—	—	—	—	—	—	—	—	
6	ECG monitor	—	—	—	—	—	—	—	—	—	—	—	—	
7	Ventilator	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms	2
8	Operation lamp	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms	2
9	Operation table	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation rooms	2
10	Mobile suction pump	—	—	—	—	—	—	—	—	—	—	—	—	
11	Patient monitor	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
12	Autoclave (Large)	2	B	—	—	—	—	—	—	—	—	—	Changed to small type	0
13	Autoclave (Small)	0	B	○	○	○	○	○	○	○	○	○	Three units are planned to be installed in CSSD	3
14	Biochemistry analyzer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
15	Centrifuge	—	—	—	—	—	—	—	—	—	—	—	—	
16	Hematology analyzer	—	—	—	—	—	—	—	—	—	—	—	—	
17	CR and image writer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	—	—	—	—	—	—	—	—	—	—	—	—	
19	Surgical instruments set (Minor)	—	—	—	—	—	—	—	—	—	—	—	—	
20	Gastrofiberscope	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the endoscopy room	1
21	Colonofiberscope	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the endoscopy room	1
22	Bronchofiberscope	—	—	—	—	—	—	—	—	—	—	—	—	
23	Electrical coagulator	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation room	2
24	C-arm	—	—	—	—	—	—	—	—	—	—	—	—	

Chui District General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity	
				①	②	③	④	⑤	⑥	⑦	Total			
1	General X-ray machine with Fluoroscopy	—	—	—	—	—	—	—	—	—	—	—	—	
2	General X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
3	Mobile X-ray machine	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
4	Ultrasound	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the department of internal medicine	1
5	Mobile ultrasound	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the inpatient ward	1
6	ECG monitor	3	A	○	○	○	○	○	○	○	○	○	One unit each is planned to be installed in the departments of surgery and internal medicine	2
7	Ventilator	4	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in ICU and two units in the operation room	3
8	Operation lamp	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
9	Operation table	—	—	—	—	—	—	—	—	—	—	—	—	
10	Mobile suction pump	2	A	○	○	○	○	○	○	○	○	○	Two units are installed in the operation room	2
11	Patient monitor	7	A	○	○	○	○	○	○	○	○	○	Three units each are planned to be installed in ICU and operation rooms	6
12	Autoclave (Large)	—	—	—	—	—	—	—	—	—	—	—	—	
13	Autoclave (Small)	2	B	○	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason	1
14	Biochemistry analyzer	—	—	—	—	—	—	—	—	—	—	—	—	
15	Centrifuge	—	—	—	—	—	—	—	—	—	—	—	—	
16	Hematology analyzer	—	—	—	—	—	—	—	—	—	—	—	—	
17	CR and image writer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	1	B	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
19	Surgical instruments set (Minor)	1	B	○	○	○	○	○	○	○	○	○	Deleted due to the budgetary reason	0
20	Gastrofiberscope	—	—	—	—	—	—	—	—	—	—	—	—	
21	Colonofiberscope	—	—	—	—	—	—	—	—	—	—	—	—	
22	Bronchofiberscope	—	—	—	—	—	—	—	—	—	—	—	—	
23	Electrical coagulator	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation room	2
24	C-arm	—	—	—	—	—	—	—	—	—	—	—	—	

Tokmok Town General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity
				①	②	③	④	⑤	⑥	⑦	Total		
1	General X-ray machine with Fluoroscopy	—	—	—	—	—	—	—	—	—	—	—	—
2	General X-ray machine	1	A	○	○	○	○	○	○	○	○	Deleted due to duplication with the Asian Development Bank	0
3	Mobile X-ray machine	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
4	Ultrasound	2	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in ultrasound diagnostic room	1
5	Mobile ultrasound	—	—	—	—	—	—	—	—	—	—	—	—
6	ECG monitor	3	A	○	○	○	○	○	○	○	○	Deleted due to duplication with the Asian Development Bank	1
7	Ventilator	1	A	○	○	○	○	○	○	○	○	Deleted due to the budgetary reason	0
8	Operation lamp	3	A	○	○	○	○	○	○	○	○	Three units are planned to be installed in the operation rooms	2
9	Operation table	3	A	○	○	○	○	○	○	○	○	Three units are planned to be installed in the operation rooms	2
10	Mobile suction pump	0	A	○	○	○	○	○	○	○	○	Three units are planned to be installed in the operation rooms	1
11	Patient monitor	4	A	○	○	○	○	○	○	○	○	Four units are planned to be installed in ICU	2
12	Autoclave (Large)	3	B	○	○	○	○	○	○	○	○	Changed to small type	0
13	Autoclave (Small)	0	B	○	○	○	○	○	○	○	○	Three units are planned to be installed in CSSD	2
14	Biochemistry analyzer	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
15	Centrifuge	0	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
16	Hematology analyzer	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
17	CR and image writer	1	A	○	○	○	○	○	○	○	○	Deleted due to duplication with the Asian Development Bank	0
18	Surgical instruments set (Major)	2	B	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
19	Surgical instruments set (Minor)	—	—	—	—	—	—	—	—	—	—	—	—
20	Gastrofiberscope	—	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the endoscopy room	1
21	Colonofiberscope	—	—	—	—	—	—	—	—	—	—	—	—
22	Bronchofiberscope	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in ICU	1
23	Electrical coagulator	3	A	○	○	○	○	○	○	○	○	Three units are planned to be installed in the operation rooms	2
24	C-arm	1	B	○	○	○	○	○	○	○	○	Deleted due to the budgetary reason	0

Kemin District General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity
				①	②	③	④	⑤	⑥	⑦	Total		
1	General X-ray machine with Fluoroscopy	—	—	—	—	—	—	—	—	—	—	—	—
2	General X-ray machine	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
3	Mobile X-ray machine	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
4	Ultrasound	2	A	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason. One unit is planned to be installed in ICU	1
5	Mobile ultrasound	0	A	○	○	○	○	○	○	○	○	One unit is planned for examination of outpatients	1
6	ECG monitor	2	A	○	○	○	○	○	○	○	○	Deleted due to the budgetary reason	0
7	Ventilator	4	A	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason. Two units are planned to be installed in ICU	2
8	Operation lamp	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
9	Operation table	—	—	—	—	—	—	—	—	—	—	—	—
10	Mobile suction pump	2	A	○	○	○	○	○	○	○	○	Deleted due to the budgetary reason	0
11	Patient monitor	2	A	○	○	○	○	○	○	○	○	Two units are planned to be installed in ICU	2
12	Autoclave (Large)	—	—	—	—	—	—	—	—	—	—	—	—
13	Autoclave (Small)	2	B	○	○	○	○	○	○	○	○	Two units are planned to be installed in CSSD	2
14	Biochemistry analyzer	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
15	Centrifuge	2	A	○	○	○	○	○	○	○	○	Two units are planned to be installed in the clinical laboratory	2
16	Hematology analyzer	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
17	CR and image writer	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	2	B	○	○	○	○	○	○	○	○	Quantity was adjusted due to the budgetary reason.	1
19	Surgical instruments set (Minor)	2	B	○	○	○	○	○	○	○	○	Deleted due to the budgetary reason	0
20	Gastrofiberscope	—	—	—	—	—	—	—	—	—	—	—	—
21	Colonofiberscope	—	—	—	—	—	—	—	—	—	—	—	—
22	Bronchofiberscope	—	—	—	—	—	—	—	—	—	—	—	—
23	Electrical coagulator	1	A	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
24	C-arm	—	—	—	—	—	—	—	—	—	—	—	—

Ivanovka Village's Branch of Issyk-Ata General Practice Center

No.	Requested Equipment	Quantity	Priority	Criteria for selection								Special Notes	Planned quantity	
				①	②	③	④	⑤	⑥	⑦	Total			
1	General X-ray machine with Fluoroscopy	–	–	–	–	–	–	–	–	–	–	–	–	–
2	General X-ray machine	–	–	–	–	–	–	–	–	–	–	–	–	–
3	Mobile X-ray machine	0	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the surgical department	1
4	Ultrasound	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the department of internal medicine	1
5	Mobile ultrasound	–	–	–	–	–	–	–	–	–	–	–	–	–
6	ECG monitor	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the department of internal medicine	1
7	Ventilator	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation room	2
8	Operation lamp	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
9	Operation table	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
10	Mobile suction pump	2	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the operation room	1
11	Patient monitor	2	A	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in the operation room	2
12	Autoclave (Large)	–	–	–	–	–	–	–	–	–	–	–	–	–
13	Autoclave (Small)	2	B	○	○	○	○	○	○	○	○	○	Two units are planned to be installed in CSSD	2
14	Biochemistry analyzer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
15	Centrifuge	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
16	Hematology analyzer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the clinical laboratory	1
17	CR and image writer	1	A	○	○	○	○	○	○	○	○	○	One unit is planned to be installed in the X-ray room	1
18	Surgical instruments set (Major)	–	–	–	–	–	–	–	–	–	–	–	–	–
19	Surgical instruments set (Minor)	–	–	–	–	–	–	–	–	–	–	–	–	–
20	Gastrofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	–
21	Colonofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	–
22	Bronchofiberscope	–	–	–	–	–	–	–	–	–	–	–	–	–
23	Electrical coagulator	–	–	–	–	–	–	–	–	–	–	–	–	–
24	C-arm	–	–	–	–	–	–	–	–	–	–	–	–	–