

資料4 ミニッツ



MINUTES OF DISCUSSIONS  
ON  
THE BASIC DESIGN STUDY  
ON  
THE PROJECT FOR THE IMPROVEMENT IN EQUIPPING OF MEDICAL  
FACILITIES  
IN  
GEORGIA

In response to the request from the Government of Georgia, the Government of Japan decided to conduct a Basic Design Study on the Project for the Improvement in Equipping of Medical Facilities in Georgia (hereinafter referred to as "the Project" ), and entrusted the Study to the Japan International Cooperation Agency (JICA).

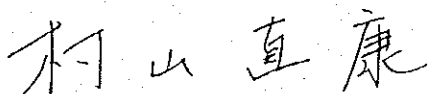
JICA sent to the Georgia a study team (hereinafter referred to as "the Team" ), which was headed by Mr. Naoyasu MURAYAMA, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, and is scheduled to stay in the country from October 24 to October 29, 1998.

The Team held a series of discussions with officials of the Government of Georgia and conducted site surveys of the hospitals.

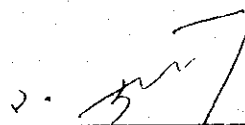
In the course of the discussions and site surveys, both parties confirmed the main items described on the attached sheets.

The Team will proceed to further work and prepare the Basic Design Study Report.

Tbilisi, October 29, 1998



Mr. Naoyasu MURAYAMA  
Leader,  
Basic Design Study Team  
JICA



Mr. Avtandil Jorbenadze, M.D.  
Minister,  
Ministry of Health of GEORGIA

## ATTACHMENT

### 1. Objective

The objective of the Grant Aid for the Project is to support the hospitals to improve the fundamental medical service through procurement of medical equipment on the principle of the replace of existing old/decrepit medical equipment.

### 2. Project Sites

(In Tbilisi)

Central Clinical Hospital

Children's Central Clinical Hospital

### 3. Responsible and Executing Organization.

(1) Responsible Agency - Ministry of Health

(2) Executing Agency - Central Clinical Hospital  
Children's Central Clinical Hospital

### 4. Items requested by the Government of Georgia.

(1) After discussions with the Team, the following items with priority were finally requested by the Government of Georgia.

(See Annex 1)

However, the final items of the Grant Aid will be decided after further studies.

(2) The equipment will be selected by the basic criteria attached as Annex 2

(3) Equipment put priority C was deleted from the Project.

### 5. Japan's Grant Aid System

1) The Government of Georgia has understood Japan's Grant Aid System as described in Annex 3.

2) The Government of Georgia will take necessary measures, as described in Annex 4 for smooth implementation of the Grant Aid on condition that the Grant Aid by the Government of Japan is extended to the Project.

6. Schedule of the Study

- 1) The consultants will carry out further studies in Georgia until November 17, 1998.
- 2) JICA will prepare a draft Basic Design Report in English and dispatch a mission in order to explain its contents around January, 1999.
- 3) In case the contents of the draft report are accepted in principle by the Government of Georgia, JICA will complete the final report and send it to the Government of Georgia around March, 1999.

7. Monitoring

Each Executing Agency has the responsibility in monitoring and reporting the activity and condition of the equipment by the Project on condition that the Grant Aid by the Government of Japan is extended to the Project. Content of the monitoring will be presented by the draft Basic Design Explanation Team.

8. Other Relevant Issues

- (1) Both sides reconfirmed that the requested two hospitals are the most strategic hospitals from a viewpoint of implementing the national programs related to The Health Care Reform.
- (2) The Government of Georgia has agreed to secure and allocate budgeted for the execution of the Project according to Annex 4.
- (3) The Government of Georgia has agreed to secure and allocate the enough budgeted to operate and maintain properly and effectively the equipment of the Project.

20

## Equipment List

**Explanation of Priority A, B, and C**

Priority A: Equipment to be procured

Priority B: Equipment required a detailed investigation for procurement

Priority C: Equipment deleted as not subject to the project

22

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## EQUIPMENT LIST BY PRIORITIES

### CENTRAL CLINICAL HOSPITAL

Item No.	Description	Qty	Priority		
			RQ	A	B
A 1	Abdominal hysterectomy instrument set	8	1	8	1
A 2	Abrams pleural biopsy set	8	1	6	1
A 3	Aggregometer	1			1
A 4	Ambulance, for ICU	1			1
A 5	Ambulance, normal	3			3
A 6	Anesthetic unit	8	4	3	1
A 7	Audiometer	1		1	
A 8	Automatic cell counter	1	1		
A 9	Automatic coloration unit	1	1		
A 10	Autopsy table	3		1	2
A 11	Autorefractometer	1		1	
A 12	Balance	4			4
A 13	Balance, analytical	1	1		
A 14	Balance, Analytical	5			5
A 15	Balance, precision, high resolution	1			1
A 16	Balance, test tubes	2			2
A 17	Bath tubs for hydrotherapy	4			4
A 18	Bath water	3			3
A 19	Bath water, transparent	1			1
A 20	Bath water, universal	1			1
A 21	Bench, physiotherapy	6			6
A 22	Beta counter	1			1
A 23	Bilirubinometer	1	1		
A 24	Biochemical analyzer	5	1	4	
A 25	Blood refrigerator	1	1		
A 26	Blood bags' seal machine	1	1		
A 27	Blood cell counter	1			1
A 28	Blood gas analyzer	1	1		
A 29	Blood pressure monitor tester	1			1
A 30	Blood pressure monitor, non invasive	2			2
A 31	Blood refrigerator	1			1
A 32	Blood units balance	1	1		
A 33	Blotting apparatus	1			1
A 34	Box for Anaerobic organisms	1			1
A 35	Camera, multiformat	1			1
A 36	Cardiac arrest emergency cart	5			5
A 37	Carpenter bench	1			1
A 38	Centrifuge for blood bags	1	1		
A 39	Centrifuge, microhematocryt	2	1	1	
A 40	Centrifuge, cyto	1	1		
A 41	Centrifuge, for haematocrite	8			3
A 42	Centrifuge, general	1	1		
A 43	Centrifuge, serologic	1	1		
A 44	Centrifuge, universal	5	2	3	
A 45	CO2 Incubator	1			1
A 46	Coagulator analyzer, semi-automatic	1	1		
A 47	Cold light source unit	2	2		
A 48	Colposcope	1	1		
A 49	Complete set for Immunologic laboratory	1			1
A 50	Complete set for Virologic laboratory	1			1
A 51	Compressed air generator	1			1
A 52	Corpses refrigerator, 3 drawers	3			2
A 53	CT Scanner, spiral	1			1
A 54	Dark room light, inactinic filter	4	2	1	1
A 55	Day-light processing machine	2			2
A 56	Defibrillator/monitor	12	2	8	2
A 57	Differential counter	1	1		
A 58	Digital colony counter	1	1		
A 59	DNA sequencing system	1			1
A 60	Drill	1			1

## EQUIPMENT LIST BY PRIORITIES

### CENTRAL CLINICAL HOSPITAL

Item No.	Description	Qty	Priority		
			RQ	A	B
A 61	Dry heat sterilizer	2			1
A 62	ECG 1 channel	5			1
A 63	ECG tester	1			1
A 64	ECG 3 channel	1	1		
A 65	ECG/Heart rate monitor	2			1
A 66	Echo-film viewer	1			1
A 67	EIA Incubator	2		1	1
A 68	EIA Photometer (reader)	2		1	1
A 69	EIA Washer	2		1	1
A 70	Electrical safety tester	1			1
A 71	Electro-ophthalmoscope	1			1
A 72	Electrocardiograph, 3 channel	2	2		
A 73	Electrocardiograph, 6 channel	1	1		
A 74	Electrocoagulator	3			3
A 75	Electroencephalograph, 16 channel	1	1		
A 76	Electrolyte analyzer	5	1	4	
A 77	Electrophoresis unit	2	1	1	
A 78	Electrosurgical unit	16	3	12	
A 79	Electrothermostate	5			5
A 80	Equipment for hemodialysis	10		5	1
A 81	Equipment for preparation dis. water	1			1
A 82	Eximer Laser for Ophtalmology	1			1
A 83	Exposimeter, automatic	4	1	3	
A 84	Fango, parafin preparation unit	4			4
A 85	Fibrobroncoscope	1	1		
A 86	Fibrocystoscope	1	1		
A 87	Fibrocolonoscope	1	1		
A 88	Fibroduodenoscope	1	1		
A 89	Fibrogastroscope	1	1		
A 90	Fibrorectoscope	1	1		
A 91	Flow Cytometer System, triple-, or four-color	1			1
A 92	Fluoroscopic/radiologic unit	2	1	1	
A 93	Fractioning press machine	1			1
A 94	Freezer	4	1	3	
A 95	Freezer (-70C)	2	1	1	
A 96	Freezer, blood plasma	1	1		
A 97	Functional beds	31	6	22	3
A 98	Gall bladder surgical instrument set	8	1	6	1
A 99	Gamma counter	1			1
A 100	Gel polymerization apparatus	1			1
A 101	Glassware for clinical chemistry	1			1
A 102	Glassware for hematology	1			1
A 103	Glassware for histology	1			1
A 104	Glassware for immunology	1			1
A 105	Glassware for microbiology	1			1
A 106	Glassware for microbiology	1			1
A 107	Gymnastic mattresses	4			4
A 108	Gynaecology basic set	8	1	6	1
A 109	Hammer, reflex	2	1		
A 110	Hemoglobinometer sahli(10PCS/PACK)	1			1
A 111	High frequency tester	1			1
A 112	Holter equipment	1		1	
A 113	I.V. cut down set	8			3
A 114	Image intensifying TV system	2	1	1	
A 115	Incubator (Thermostat), laboratory	2			2
A 116	Incubator, laboratory	1	1		
A 117	Infusion pump, syringe	25			25
A 118	Infusion pump, volumetric	57	3		49
A 119	Instrument set for consulting room	3	1	2	
A 120	Instrument set for intubation	15			15



## EQUIPMENT LIST BY PRIORITIES

### CENTRAL CLINICAL HOSPITAL

Item No.	Description	Qty	Priority		
			RQ	A	B
A 121	Instrument set for Ophtalmology	2		2	
A 122	Instrument set for Othorhinolaringology	2	1	1	
A 123	Instrument set for treatment room	18	1	17	
A 124	NA				
A 125	Instrument set for Urology	2	1	1	
A 126	Instrument set for ward	50			50
A 127	Intestinal surgical instruments set	8	1	6	1
A 128	Laboratory refrigerator	5			5
A 129	Laminar Flow Unit, Safety, Biohazard Class II A	2			2
A 130	Laminar Flow Unit, Safety, Biohazard Class II B	2			2
A 131	Lamp, examination, mobile	31	5	22	4
A 132	Lamp, surgical batteries, mobile	10	3	5	1
A 133	Lamp, surgical, ceiling	9	5	2	1
A 134	Laparoscope for surgery	5		1	4
A 135	Laparoscope for diagnostic	2			2
A 136	Laryngoscope, 3 curved blades	2	1	1	
A 137	Laryngoscope, adult	8	6	1	1
A 138	Laserotherapy equipment	1			1
A 139	Magnetic stirrer	1	1		
A 140	Mechanical bench	1			1
A 141	Microcentrifuge	1			1
A 142	Micropipette multichannel (100-1000mkl)	5			5
A 143	Micropipette multichannel (5-50mkl)	5			5
A 144	Micropipette single-channel (0.5-10mkl)	5			5
A 145	Micropipette single-channel (100-1000mkl)	3			3
A 146	Micropipette single-channel (5-50mkl)	5			5
A 147	Microscope, binocular	2			2
A 148	Microscope, fluorescency	2			2
A 149	Microscope Invert	1			1
A 150	NA				
A 151	Microscope, Binocular	17	5	12	
A 152	Microscope, Fluorescency	1		1	
A 153	Microtome, rotary	1		1	
A 154	Microwave therapy equipment	3			3
A 155	Mixer, processing fluids	2			2
A 156	Monitor's equipped shelves	21			21
A 157	Monitor, blood pressure, non invasive	29			29
A 158	Monitor, ECG/HR/Respiration	12			12
A 159	Monitor ECG/HR/Temp/Respiration	23	6	15	2
A 160	Mullimeter tester	3			3
A 161	Negatoscope, 2 parts	6	2	4	
A 162	Negatoscope, 3 parts	4	3	1	
A 163	Negatoscope, 4 parts	4	2	1	1
A 164	Operating table	1			1
A 165	Operating table (general)	8	6	1	1
A 166	Oscilloscope	1			1
A 167	Otho-ophthalmoscope	61	6	50	5
A 168	Oxymeter, pulse	15	3	11	1
A 169	Pacemaker tester	1			1
A 170	Parallel bars	4			4
A 171	Patient identifier machine	4			4
A 172	Patient lifter, hydrotherapy	2			2
A 173	Patient monitoring central w/printer	3	1		2
A 174	pH meter	7	1	5	
A 175	Flame photometer	1			1
A 176	Plumber bench	1			1
A 177	Pocket lamp	4			4
A 178	Postmortem instrument set	6			5
A 179	Power supply, universal	1			1
A 180	Printer	1			1
A 181	Prolapse tray instrument set	8			3

## EQUIPMENT LIST BY PRIORITIES

### CENTRAL CLINICAL HOSPITAL

Item No.	Description	Qty	Priority		
			RQ	A	B
A 182	Radiologic unit, general examination	2	1	1	
A 183	Refrigerator	7			
A 184	Refrigerator, laboratory	4	1	3	
A 185	Resuscitator, manual, adult	41	10	30	1
A 186	Resuscitator, manual, pediatric	3			3
A 187	Scale, adult, antropometric	25	5	20	
A 188	Seal machine	4			4
A 189	Set of kinesi/mechanotherapy devices	1			1
A 190	Shortwave therapy equipment	4			4
A 191	Skin biopsy set	8			8
A 192	Skin graft surgical instrument set	8			8
A 193	Soldering equipment	1			1
A 194	Spectrophotometer, UV-VIS	1	1		
A 195	Sphygmomanometer, adult, table	14	5		9
A 196	Sphygmomanometer, adult, mobile	8			8
A 197	Sphygmomanometer, table	43	21		22
A 198	Sphygmomanometer, wall mounted	21			21
A 199	Spirometer	1	1		
A 200	Staining equipment	1	1		
A 201	Sterilizer, dry	27	1	26	
A 202	Sterilizer dry, big	2	1	1	
A 203	Sterilizer, Hot water immersion	2			2
A 204	Sterilizer, steam, horizontal	4	2	2	
A 205	Sterilizer, steam, vertical	3			3
A 206	Stethoscope, adult	75			75
A 207	Stirrer, heating, magnetic	1	1		
A 208	Stirrer, RPR	1			1
A 209	Stirrer, serologic	1			1
A 210	Stop-Watch	5			5
A 211	Suction pump, high pressure	10	6	3	1
A 212	Suction pump, low pressure	44	23	19	2
A 213	Suction pump, toracic	11	2	3	1
A 214	Surgical instruments set, large	8	2	5	1
A 215	Surgical microscope	3	1		2
A 216	Surgical minor set	22	11	11	
A 217	Suture set	8			8
A 218	System for automated Bacterial identification	1			1
A 219	Thermal Cycler for PCR system	1			1
A 220	Thermostate for Electrophoresis equipment	1			1
A 221	Thyroidectomy surgical instrument set	8	1	6	1
A 222	Timer stopclock, 60 minutes	3			3
A 223	Tracheostomy set	18	1	17	
A 224	Trolley, emergency	2	1	1	
A 225	Tubal ligation set	8	1	6	1
A 226	Ultrasound therapy equipment	4			4
A 227	Urine analyzer	6	1	5	
A 228	US film viewer	2			2
A 229	US power tester	1			1
A 230	US probe, abdominal	3	1	2	
A 231	US probe, cardiology	2	1		
A 232	US probe obst/gynecological	1	1		
A 233	US probe, urology	2	1		1
A 234	US scanner camera multifomat	2			2
A 235	US scanner printer	2			2
A 236	US scanner, multipurpose	3	1	2	
A 237	US scanner, portable	1	1		
A 238	UV-IV therapy equipment	4			4
A 239	Vacutainer for blood samples with EDTA, plastic.	500			500
A 240	Vacuum generator	1			1
A 241	Vacuum pump	3			3
A 242	Vaginal repair & hysterectomy inst. set	8	1	5	1

## EQUIPMENT LIST BY PRIORITIES

### CENTRAL CLINICAL HOSPITAL

Item No.	Description	Qty	Priority		
			RQ	A	B
A 243	Vaginal suture set	8			3
A 244	Vasectomy surgical instrument set	8	1	5	!
A 245	Veloergometer	1			!
A 246	Ventilator volumetric, adult	11	2	8	!
A 247	Ventilator, adult, mobile	15	2	13	
A 248	Ventilator, anesthetic	8	4	3	!
A 249	Vortex mixer	1			!
A 250	Washer, flexible endoscopes	2	1	1	
A 251	Water bath, universal	5	1	4	
A 252	Water distiller & deionizing	3	1	2	
A 253	Wave generator	1			!
A 254	Westergreen device	1			!
A 255	X-ray film cassettes (package)	4	1	2	!
A 256	X-ray film processor, manual	2	1	1	
A 257	X-ray film processor, small capacity	3			3
A 258	X-ray protecting apron	2	2		
A 259	X-ray protecting devices	2			2
A 260	X-ray unit, mobile	3	1	2	
A 261	Express laboratory equipment	1		1	

28

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**EQUIPMENT LIST BY PRIORITIES**  
**CHILDREN'S CENTRAL CLINICAL HOSPITAL**

Item No.	Description	Qty	Priority			
			RQ	A	B	C
B 1	Abdominal hysterectomy instrument set	12		1		
B 2	Abrams pleural biopsy set	10		1	9	
B 3	Aggregometer	1				1
B 4	Ambulance, for ICU	1				1
B 5	Ambulance, normal	3				3
B 6	Anesthetic unit	6	3		3	
B 7	Apnea monitor	6				6
B 8	Automatic cell counter	3	1		2	
B 9	Automatic coloration unit	2	1		1	
B 10	Autopsy table	3			1	2
B 11	Balance	2				2
B 12	Balance, analysis	2	1		1	
B 13	Balance, analytical	2				2
B 14	Balance, precision, high resolution	2				2
B 15	Balance, test tubes	4				4
B 16	Bath water	4				4
B 17	Bath water, transparent	3				3
B 18	Bath water, universal	2				2
B 19	Beta counter	1				1
B 20	Bilirubinometer	2	1		1	
B 21	Biochemical analyzer	2	1		1	
B 22	Blood refrigerator	1				1
B 23	Blood bags' seal machine	1	1			
B 24	Blood cell counter	3				3
B 25	Blood gas analyzer	3	1		2	
B 26	Blood pressure monitor tester	1				1
B 27	Blood pressure monitor, non invasive	2				2
B 28	Blood refrigerator	1	1			
B 29	Blood units balance	1	1			
B 30	Blotting apparatus	1				1
B 31	Box for Anaerobic organisms	1				1
B 32	Caesarian set	2	1		1	
B 33	Cardiac arrest emergency cart	3				3
B 34	Centrifuge for blood bags	1	1			
B 35	Centrifuge, microhematocyt	4	1		3	
B 36	Centrifuge, cyto	3	1		2	
B 37	Centrifuge, for haematocrite	4	1		3	
B 38	Centrifuge, general	2	1		1	
B 39	Centrifuge, serologic	1	1			
B 40	Centrifuge, universal	7	1		6	
B 41	CO2 Incubator	1				1
B 42	Coagulator analyzer, semi-automatic	3	1		2	
B 43	Cold light source unit	3	2		1	
B 44	Colposcope	1	1			
B 45	Complete set for Immunologic laboratory	1				1
B 46	Complete set for Virologic laboratory	1				1
B 47	Corpses refrigerator, 3 drawers	3			1	2
B 48	CT Scanner, spiral	1				1
B 49	Dark room light, inactinic filter	2	1		1	
B 50	Defibrillator/monitor	8	1		7	
B 51	Defibrillator, neonatal pads	4	1		3	
B 52	Delivery table	4	1		3	
B 53	Differential counter	3	1		2	
B 54	Digital colony counter	2	1		1	
B 55	DNA sequencing system	1				1
B 56	Drill	1				1
B 57	Dry heat sterilizer	2				2
B 58	ECG 1 channel	5				5
B 59	ECG tester	1				1
B 60	ECG/Heart rate monitor	2				2
B 61	EEG, 16 channel	1				1

## EQUIPMENT LIST BY PRIORITIES

### CHILDREN'S CENTRAL CLINICAL HOSPITAL

Item No.	Description	Qty	Priority		
			RQ	A	B
B 62	EIA Incubator	2			2
B 63	EIA Photometer (reader)	2			2
B 64	EIA Washer	2			2
B 65	Electrical safety tester	1			1
B 66	Electrocardiograph, 3 channel	2	2		
B 67	Electrocardiograph, 6 channel	1	1		
B 68	Electrocoagulator	2			2
B 69	Electroencephalograph, 16 channel	1	1		
B 70	Electrolyte analyzer	2	1	1	
B 71	Electrophoresis unit	3	1	2	
B 72	Electrosurgical unit	15	3	12	
B 73	Electrothermostate	2			2
B 74	Equipment for hemodialysis	10			10
B 75	Equipment for preparation dis. Water	1	1		
B 76	Examination lamp	2			2
B 77	Exposimeter, automatic	3	1	2	
B 78	Fibrobroncoscope	1			1
B 79	Fibrobroncoscope, ped	1	1		
B 80	Fibrocystoscope, ped	1	1		
B 81	Fibrocolonoscope, ped	1	1		
B 82	Fibroduodenoscope, ped	1	1		
B 83	Fibrogastroscope, ped	1	1		
B 84	Fibrorectoscope, ped	1	1		
B 85	Flow Cytometer System, triple-, or four-color	1			1
B 86	Fluoroscopic/radiologic unit	1	1		
B 87	Fractioning press machine	1			
B 88	Freezer	4	1	3	
B 89	Freezer (-70C)	2	1	1	
B 90	Freezer, blood plasma	1	1		
B 91	Functional beds	20	6	12	2
B 92	Gall bladder surgical instrument set	10	1	9	
B 93	Gamma counter	1			
B 94	Gel polymerization apparatus	1			
B 95	Glassware for clinical chemistry	1			
B 96	Glassware for hematology	1			
B 97	Glassware for histology	1			
B 98	Glassware for immunology	1			
B 99	Glassware for microbiology	1			
B 100	Gynaecology basic set	12	1	11	
B 101	Hammer, reflex	33			33
B 102	Hemoglobinometer sahli(10PCS/PACK)	3			3
B 103	High frequency tester	1			1
B 104	Holter equipment	1		1	
B 105	I.V. cut down set	14			14
B 106	Image intensifying TV system	1	1		
B 107	Incubator (thermostat), laboratory	2			2
B 108	Incubator, laboratory	2	1	1	
B 109	Infant incubator, ICU	6	2	4	
B 110	Infant incubator, normal	18	5	10	3
B 111	Infant warmer	24	3	19	2
B 112	Infusion pump, general	2			2
B 113	Infusion pump, syringe	25			25
B 114	Infusion pump, syringe, infant	6	3		3
B 115	Infusion pump, volumetric	46	4		42
B 116	Infusion pump, volumetric, infant	6			6
B 117	Instrument set for consulting room	3			3
B 118	Instrument set for delivery	6	1	5	
B 119	Instrument set for intubation	23			23
B 120	Instrument set for intubation of the trachea	2			2
B 121	Instrument set for Obs. & Gyn. Exam/treat.	5	2	4	
B 122	Instrument set for Obs. & Gyne. Consulting	1			1
B 123	Instrument set for Othorinolaringology	2	1	1	

80

587

**EQUIPMENT LIST BY PRIORITIES**  
**CHILDREN'S CENTRAL CLINICAL HOSPITAL**

Item No.	Description	Qty	Priority		
			RQ	A	B
B 124	NA				
B 125	Instrument set for treatment room	19			19
B 126	Instrument set for ward	35			35
B 127	Intestinal surgical instruments set	12	1	11	
B 128	Laboratory refrigerator	2			2
B 129	Laminar Flow Unit, Safety, Biohazard Class II A	2			2
B 130	Laminar Flow Unit, Safety, Biohazard Class II B	2			2
B 131	Lamp, examination, mobile	25	3		22
B 132	Lamp, surgical batteries, mobile	7	3	4	
B 133	Lamp, surgical, ceiling	7	1	6	
B 134	Laparoscope for diagnostic	2			2
B 135	Laparoscope for surgery	2		1	1
B 136	Laryngoscope, 3 curved blades	2			2
B 137	Laryngoscope, 3 curved blades, infant	7	2		5
B 138	Laryngoscope, adult/ped.	1	1		
B 139	Laryngoscope, ped	5	1	4	
B 140	Laryngoscope, straight blade, infant	7	1	6	
B 141	Magnetic stirrer	2	1	1	
B 142	Mechanical bench	1			1
B 143	Microcentrifuge	1			1
B 144	Micropipette multichannel (5-50mkl)	5			5
B 145	Micropipette multichannel (100-1000mkl)	5			5
B 146	Micropipette single-channel (0.5-10mkl)	5			5
B 147	Micropipette single-channel (5-50mkl)	3			3
B 148	Micropipette single-channel (100-1000mkl)	5			5
B 149	Microscope, fluorescence	2			2
B 150	NA				
B 151	Microscope Invert	1			1
B 152	Microscope, binocular	19	7	12	
B 153	Microscope, fluorescence	1		1	
B 154	Microtome, rotary	1		1	
B 155	Mixer, processing fluids	1			1
B 156	Monitor pO2	2			2
B 157	Monitor's equipped shelves	25			25
B 158	Monitor, blood pressure, invasive	5			5
B 159	Monitor, blood pressure, non invasive	32			32
B 160	Monitor, ECG/HR/Respiration	12			12
B 161	Monitor ECG/HR/Temp/Respiration	20	6	13	1
B 162	Monitor ECG/HR/Temp/Blood pr.	2			2
B 163	Multimeter tester	3			3
B 164	Nebulizer ultrasonic	8	4	4	
B 165	Negatoscope, 2 parts	5	1	4	
B 166	Negatoscope, 3 parts	7	2	5	
B 167	Negatoscope, 4 parts	2	1	1	
B 168	Obstetric bed	4			4
B 169	Operating table	1			1
B 170	Operating table (general and cesaria)	1	1		
B 171	Operating table (general)	5	1	4	
B 172	Oscilloscope	1			1
B 173	Otho-ophthalmoscope	41	5	34	2
B 174	Oxymeter, pulse	24	3	20	1
B 175	Pacemaker tester	1			1
B 176	Patient identifier machine	3			3
B 177	Patient monitoring central w/printer	1			1
B 178	pH-meter	5	1	4	
B 179	Flame photometer	2			2
B 180	Pocket lamp	6			6
B 181	Postmortem instrument set	6		1	5
B 182	Power supply, universal	1			1
B 183	Prolapse tray instrument set	10			10
B 184	Radiologic unit, general examination	2	1	1	
B 185	Refrigerator	8			8

**EQUIPMENT LIST BY PRIORITIES**  
**CHILDREN'S CENTRAL CLINICAL HOSPITAL**

Item No.	Description	Qty	Priority			
			RQ	A	B	C
B 186	Refrigerator, laboratory	7		1	6	
B 187	Resuscitator, manual, adult/pediatric	2				2
B 188	Resuscitator, infant	1				1
B 189	Resuscitator, manual, adult	4				4
B 190	Resuscitator, manual, adult/pediatric	25				25
B 191	Resuscitator, manual, adult/pediatric	35		10	25	
B 192	Resuscitator, manual, infant	11				11
B 193	Resuscitator, manual, neonatal	4				4
B 194	Resuscitator, manual, pediatric	1				1
B 195	Scale, adult, antropometric	3				3
B 196	Scale, adult/ped., antropometric	8		1		7
B 197	Scale, infant, antropometric	8		1		7
B 198	Scale, ped., antropometric	17				17
B 199	Seal machine	2				2
B 200	Skin biopsy set	10				10
B 201	Skin graft surgical instrument set	10				10
B 202	Spectrophotometer, UV-VIS	2		1	1	
B 203	Sphygmomanometer, table, adult/ped.	55		15	26	14
B 204	Sphygmomanometer, adult/ped.	9				9
B 205	Sphygmomanometer, adult/ped, Mobile	2				2
B 206	Sphygmomanometer, infant, mobile	8		5	2	1
B 207	Sphygmomanometer, table, infant	4				4
B 208	Sphygmomanometer, wall mounted	24				24
B 209	Sphygmomanometer, adult, mobile	6				6
B 210	Sphygmomanometer, neonatal, mobile	8		4	4	
B 211	Spirometer	1		1		
B 212	Staining equipment	1		1		
B 213	Sterilizer, dry	29		1	28	
B 214	Sterilizer dry, big	1		1		
B 215	Sterilizer, Hot water immersion	2				2
B 216	Sterilizer, steam, horizontal	2		2		
B 217	Sterilizer, steam, vertical	6				6
B 218	Stethoscope, adult	20				20
B 219	Stethoscope, adult/ped.	65				65
B 220	Stethoscope, infant	17				17
B 221	Stethoscope, pediatric	15				15
B 222	Stethoscope, pinard	5				5
B 223	Stirrer, heating, magnetic	2		1	1	
B 224	Stirrer, RPR	1				1
B 225	Stirrer, serologic	3				3
B 226	Stop-Watch	2				2
B 227	Suction pump	3				3
B 228	Suction pump, gynecological	3		2	1	
B 229	Suction pump, high pressure	8		1	7	
B 230	Suction pump, low pressure	60		20	38	2
B 231	Suction pump, toracic	9		3	5	1
B 232	Surgical instruments set, large	10		2	8	
B 233	Surgical microscope	2		1		1
B 234	Surgical minor set	21		10	7	4
B 235	Suture set	14				14
B 236	System for automated Bacterial identification and susceptibility testing	1				1
B 237	Thermal Cycler for PCR system	1				1
B 238	Thermostat for Electrophoresis equipment	1				1
B 239	Thyroidectomy surgical instrument set	10		1	9	
B 240	Timer stopclock, 60 minutes	7				7
B 241	Tracheostomy set	27		1	25	1
B 242	Tracheostomy set, infant	6		1	5	
B 243	Trolley, emergency	1		1		
B 244	Tubal ligation set	12		1	11	
B 245	Urine analyzer	4		1	3	
B 246	US fetal detector	2				2
B 247	US film viewer	2				2

**EQUIPMENT LIST BY PRIORITIES**  
**CHILDREN'S CENTRAL CLINICAL HOSPITAL**

Item No.	Description	Qty	Priority		
			RQ	A	B
B 248	US power tester	1			1
B 249	US probe, abdominal	2	1	1	
B 250	US probe, cardiology	2	1	1	
B 251	US probe, urology	2			2
B 252	US scanner camera multiformat	2			2
B 253	US scanner printer	2			2
B 254	US scanner, multipurpose	2	1	1	
B 255	US scanner, portable	1	1		
B 256	Vacutainer for blood samples with EDTA, plastic, 5	500			500
B 257	Vacuum pump	5			5
B 258	Vaginal repair & hysterectomy inst. Set	12	1	11	
B 259	Vaginal suture set	16			16
B 260	Vasectomy surgical instrument set	10	1	9	
B 261	Veloergometer	1			1
B 262	Ventilator volumetric, adult	4	1	2	1
B 263	Ventilator volumetric, infant	6	1	5	
B 264	Ventilator volumetric, ped.	10	1	8	1
B 265	Ventilator, adult, mobile	1			1
B 266	Ventilator, adult/ped.	4	1		3
B 267	Ventilator, anesthetic	6	3	3	
B 268	Ventilator, pediatric	2	1	1	
B 269	Vortex mixer	1			1
B 270	Washer, flexible endoscopes	3	1	2	
B 271	Water bath, universal	2			2
B 272	Water distiller & deionizing	4	1	3	
B 273	Wave generator	1			1
B 274	Westergreen device	3			3
B 275	X-ray film cassettes (package)	4	1	2	1
B 276	X-ray film processor, manual	3	1	2	
B 277	X-ray film processor, small capacity	2			2
B 278	X-ray protecting apron	2	2		
B 279	X-ray protecting devices	2			2
B 280	X-ray unit, mobile	2	1	1	
B 281	Express laboratory equipment	1		1	

20

205 / 1



## Basic Criteria for Selecting the Equipment

1. Criteria for giving High priority
  - (1) Equipment that is to be replaced for existing old/ decrepit equipment.
  - (2) Equipment that is to be a supplement for the equipment lacking distinctly in its quantity.
  - (3) Equipment that is required for basic hospital treatment / diagnosis.
  - (4) Equipment that is easy to operate and maintain.
  - (5) Equipment that may give much benefit / effect to hospital.
  - (6) Equipment that is highly cost-effective.
  - (7) Equipment that is proven for its medical usefulness (necessity).
  
2. Criteria for giving Low priority
  - (1) Equipment that required high operation and maintenance cost.
  - (2) Equipment that has limited benefit / effect to hospital.
  - (3) Equipment that is lowly cost-effective.
  - (4) Equipment that is not for treatment / diagnosis use, but for academic research purposes.
  - (5) Equipment that can be substituted with a simple ones.
  - (6) Equipment that may cause environmental pollution by its medical waste etc.
  - (7) Equipment that is not proven for its medical usefulness (necessity).
  - (8) Equipment that is for personal usage by hospital staff ( not medical use).
  - (9) Equipment that has than minimum required quantity (inefficient, repetitive equipment ).

### Additional Criteria for Selecting the Equipment

( After field survey and considering Recipients condition )

1. Additional Criteria for giving High priority.
  - (1) Equipment that can be operated by hospital's current technical capabilities.
  - (2) Equipment that can be operated / maintained by hospital staff.
  - (3) Equipment that matches with hospital's social position / function ( referral system, local needs ).
  - (4) Equipment that can be expected to be useful with other donor's assistance.

## 2. Additional Criteria for giving Low priority

- (1) Equipment that is difficult to locally procure its spare parts and consumables.
- (2) Equipment that cannot be operated by hospital's current technical capability.
- (3) Equipment that seem to be difficult to operate / maintained by present hospital's staff.
- (4) Equipment that dose not match with hospital's social position / function ( referral system, local needs ).
- (5) Equipment that requires large scope of infrastructure work ( water, electricity supply, drain, etc )for its installation.
- (6) Equipment that can be substituted by efficient usage of existing equipment.

## Criteria when International Standard Exists

Standard of WHO (ex. X-ray equipment, etc ) is applicable on case by case basis.

## Japan's Grant Aid Program

### 1. Japan's Grant Aid Procedures

- (1) The Japan's Grant Aid Program is executed by the following procedures.

**Application** (Request made by a recipient country)

**Study** (Preparatory Study / Basic Design Study conducted by JICA)

**Appraisal & Approval** (Appraisal by the Government of Japan and Approval by the Cabinet of Japan)

**Determination of Implementation** (Exchange of Notes between the both Governments)

**Implementation** (Implementation of the Project)

- (2) Firstly, an application or a request for a project made by the recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to see whether or not it is suitable for Japan's Grant Aid. If the request is deemed suitable, the Government of Japan entrusts a study on the request to JICA (Japan International Cooperation Agency).

Secondly, JICA conducts the Study (Basic Design Study), using a Japanese consulting firm. If the background and objective of the requested project are not clear, a Preparatory Study is conducted prior to a Basic Design Study.

Thirdly, the Government of Japan appraises the Project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study Report prepared by JICA and the results are then submitted to the Cabinet for approval.

Fourthly, the Project approved by the Cabinet becomes official when pledged by the Exchange of Notes signed by the both Governments.

Finally, for the implementation of the Project, JICA assists the recipient country in preparing contracts and so on.

## 2. Contents of the Study

### (1) Contents of the Study

The purpose of the Study (Preparatory Study/Basic Design Study) conducted on a project requested by JICA is to provide a basic document necessary for appraisal of the project by the Japanese Government. The contents of the Study are as follows:

- a) to confirm background, objectives, benefits of the project and also institutional capacity of agencies concerned of the recipient country necessary for project implementation,
- b) to evaluate appropriateness of the Project for the Grant Aid Scheme from a technical, social and economical point of view,
- c) to confirm items agreed on by the both parties concerning a basic concept of the project,
- d) to prepare a basic design of the project,
- e) to estimate cost involved in the project.

Final project components are subject to approval by the Government of Japan and therefore may differ from an original request.

Implementing the project, the Government of Japan requests the recipient country to take necessary measures involved which are itemized on Exchange of Notes.

### (2) Selecting (a) Consulting Firm(s)

For smooth implementation of the study, JICA uses (a) consulting firm(s) registered. JICA selects (a) firm(s) through proposals submitted by firms which are interested. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference made by JICA.

The consulting firm(s) used for the study is (are) recommended by JICA to a recipient country after Exchange of Notes, in order to maintain technical consistency.

### (3) Status of a Preparatory Study in the Grant Aid Program

A Preparatory Study is conducted during the second step of a project formulation & preparation as mentioned above.

A result of the study will be utilized in Japan to decide if the Project is to be suitable for a Basic Design Study

Based on the result of the Basic Design Study, the Government would proceed to the stage of decision making process (appraisal and approval).

It is important to notice that at the stage of Preparatory Study, no commitment is made by the Japanese side concerning the realization of the Project in the scheme of Grant Aid Program.

### 3. Japan's Grant Aid Scheme

(1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non reimbursable funds needed to procure facilities, equipment and services for economic and social development of the country under the following principles in accordance with relevant laws and regulations of Japan. The Grant Aid is not in a form of donation or such.

(2) Exchange of Notes (E/N)

The Japan's Grant Aid is extended in accordance with the Exchange of Notes by both Governments, in which the objectives of the Project, period of execution, conditions and amount of the Grant etc. are confirmed.

(3) "The period of the Grant Aid" means one Japanese fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedure such as Exchange of Notes, concluding a contract with (a) consulting firm(s) and (a) contractor(s) and a final payment to them must be completed.

(4) Under the Grant, in principle, products and services of origins of Japan or the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant may be used for the purchase of products or services of a third country origin. However the prime contractors, namely, consulting, contractor and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons.)

(5) Necessity of the "Verification"

The Government of the recipient country or its designated authority will conclude into contracts in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. The "Verification" is deemed necessary to secure accountability to

Japanese tax payers.

(6) Undertakings required to the Government of the recipient country  
In the implementation of the Grant Aid, the recipient country is required to undertake necessary measures such as the following:

- a) to secure land necessary for the sites of the project and to clear and level the land prior to commencement of the construction work,
- b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) to secure buildings prior to the installation work in case the Project is providing equipment,
- d) to ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) to exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(7) Proper Use

The recipient country is required to maintain and use facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for their operation and maintenance as well as to bear all expenses other than those to be borne by the Grant Aid.

(8) Re-export

The products purchased under the Grant Aid shall not be re-exported

from the recipient country.

(9) Banking Arrangement (B/A)

- a) The Government of the recipient country or its designated authority shall open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank" ). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by Government of the recipient country or its designated authority under the contracts verified.
  
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay issued by the Government of the recipient country or its designated authority.

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**Necessary Measures to be Taken by the Government of Georgia**

To

1. provide data and information necessary for the Grant Aid,
2. secure the site for the Grant Aid,
3. clear, level and reclaim the site prior to commencement of the Grant Aid,
4. undertake incidental outdoor works such as gardening, fencing, gates and exterior lightning in and around the site,
5. provide facilities for distribution of electricity, water supply, telephone, drainage, sewerage and other incidental facilities to the site,
  - (1) electricity distributing line to the site
  - (2) city water distribution main to the site
  - (3) main city drainage to the site
  - (4) telephone trunk line and the main distribution panel of building
  - (5) general furniture such as carpets, curtains, tables, chairs and others
6. bear commissions to the Japanese foreign exchange bank for its banking service based upon the Banking Arrangement (B/A), namely the advertising commission of the Authorization to Pay (A/P) and payment commission,
7. ensure prompt unloading, tax exemption, customs clearance at the port of disembarkation in Georgia and prompt internal transportation therein of the materials and equipment for the Project purchased under the Grant Aid,
8. exempt Japanese juridical and physical nationals engaged in the Grant Aid from customs duties, internal taxes and other fiscal levies which may be imposed in Georgia with respect to the supply of the products and services under the verified contracts,
9. accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such facilities as may be necessary for their entry into Georgia and stay therein for the performance of their work,
10. provide necessary permissions, licenses and other authorizations for implementing the Grant Aid, if necessary,
11. assign appropriate budget and technical and administrative staff members for proper and effective operation and maintenance of equipment procured under the Grant Aid,
12. maintain and use properly and effectively the facilities constructed and the equipment procured under the Grant Aid, and
13. bear all the expenses, other than those to be borne by the Japan's Grant Aid within the scope of the Project



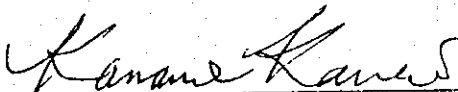
**MINUTES OF DISCUSSIONS**  
**ON**  
**BASIC DESIGN STUDY**  
**ON**  
**THE PROJECT FOR THE IMPROVEMENT IN EQUIPPING OF MEDICAL**  
**FACILITIES**  
**IN**  
**GEORGIA**  
**(CONSULTATION ON DRAFT REPORT)**

In October 1998, the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team on the Project for the Improvement in Equipping of Medical Facilities in Georgia (hereinafter referred to as "the Project"), and through discussions, site surveys, and technical examination of the results in Japan, has prepared the draft report of the study.

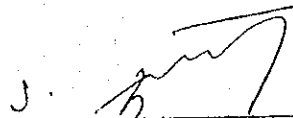
In order to explain and to consult the Georgia side on the components of the draft report, JICA sent to Georgia a Study Team, which is headed by Dr. Kaname Kanai, Bureau of International Cooperation, International Medical Center of Japan, Ministry of Health and Welfare and is scheduled to stay in the country from January 19 to January 26, 1999.

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

Tbilisi, January 25, 1999



Mr. Kaname KANAI, M.D.  
Leader,  
Draft Basic Design Explanation Team  
JICA



Mr. Avtandil JORBENADZE, M.D.  
Minister,  
Ministry of Health of GEORGIA

## ATTACHMENT

### 1. Components of the draft report

The Government of Georgia has in principle agreed and accepted the components of the draft report proposed by the Team. The equipment list of the draft report is described in **Annex 1**.

The final equipment which will be procured under the Project will be decided by Japanese side after further study.

### 2. Japan's Grant Aid System

(1) The Government of Georgia has understood the Japan's Grant Aid System as described in **Annex 2**.

(2) The Government of Georgia will take necessary measures, as described in **Annex 3** for smooth implementation of the Grant Aid, on condition that the Grant Aid by the Government of Japan is extended to the Project.

### 3. Presentation of the final report

JICA will make the final report in accordance with the confirmed items and send it to the Government of Georgia around March, 1999.

### 4. Monitoring

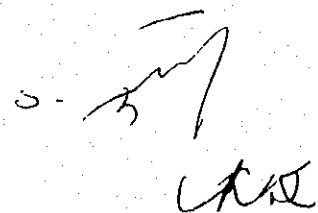
The Ministry of Health of Georgia has the responsibility to evaluate the outcome of the Project by monitoring the activities of the hospitals, and will submit the report to the Japanese side annually. The format and the monitoring indicators of the report is described in **Annex 4**.

### 5. Other Relevant Issues

The Government of Georgia will take the following measures:

(1) to secure and to allocate the enough budget to operate and maintain properly and effectively the equipment of the Project.

(2) to complete renovation works of X-ray diagnosis room, corpses refrigerator room and sterilizing room in the project sites prior to installation stage of the Project.



## Equipment List for Central Clinical Hospital

ANNEX I

Item No.	Dept.	Equipment Name	Qty.
A 1	Blood Bank	Blood refrigerator	1
A 2	Blood Bank	Blood bags' seal machine	1
A 3	Blood Bank	Blood units balance	1
A 4	Blood Bank	Centrifuge for blood bags	1
A 5	Blood Bank	Freezer (-70C)	1
A 6	Blood Bank	Freezer, blood plasma	1
A 7	Central Laboratory	Automatic cell counter	1
A 8	Central Laboratory	Balance, analytical	1
A 9	Central Laboratory	Bilirubinometer	1
A 10	Central Laboratory	Biochemical analyzer	1
A 11	Central Laboratory	Blood gas analyzer	1
A 12	Central Laboratory	Centrifuge, microhematocryt	1
A 13	Central Laboratory	Centrifuge, cyto	1
A 14	Central Laboratory	Centrifuge, general	1
A 15	Central Laboratory	Centrifuge, serologic	1
A 16	Central Laboratory	Centrifuge, universal	1
A 17	Central Laboratory	Coagulator analyzer, semi-automatic	1
A 18	Central Laboratory	Differential counter	1
A 19	Central Laboratory	Digital colony counter	1
A 20	Central Laboratory	EIA Incubator	1
A 21	Central Laboratory	EIA Photometer (reader)	1
A 22	Central Laboratory	EIA Washer	1
A 23	Central Laboratory	Electrolyte analyzer	1
A 24	Central Laboratory	Electrophoresis unit	1
A 25	Central Laboratory	Incubator, laboratory	1
A 26	Central Laboratory	Magnetic stirrer	1
A 27	Central Laboratory	Microscope, Binocular	5
A 28	Central Laboratory	Refrigerator, laboratory	1
A 29	Central Laboratory	Spectrophotometer, UV-VIS	1
A 30	Central Laboratory	Staining equipment	1
A 31	Central Laboratory	Urine analyzer	1
A 32	Central Laboratory	Water bath, universal	1
A 33	Central Laboratory	Water distiller & deionizing	1
A 34	Central Laboratory	pH meter	1
A 35	Central Laboratory	Sterilizer, dry	1
A 36	CSSD	Sterilizer, steam, horizontal	2
A 37	Diagnostic C.	Electrocardiograph, 3 channel	2
A 38	Diagnostic C.	Electrocardiograph, 6 channel	1
A 39	Diagnostic C.	Electroencepalograph, 16 channel	1
A 40	Diagnostic C.	Holter equipment	1
A 41	Diagnostic C.	Scale, adult, antropometric	5
A 42	Diagnostic C.	Spirometer	1
A 43	Diagnostic C.	US probe, abdominal	1
A 44	Diagnostic C.	US probe, cardiology	1
A 45	Diagnostic C.	US probe obst/gynecological	1
A 46	Diagnostic C.	US probe, urology	1
A 47	Diagnostic C.	US scanner, multipurpose	1
A 48	Diagnostic C.	US scanner, portable	1
A 49	Emergency	Trolley, emergency	1
A 50	Emergency	Express laboratory equipment	1
A 51	Endoscopy	Cold light source unit	2
A 52	Endoscopy	Fiberbroncoscope	1
A 53	Endoscopy	Fibercolonoscope	1
A 54	Endoscopy	Fiberduodenoscope	1
A 55	Endoscopy	Fibergastroscope	1
A 56	Endoscopy	Washer, flexible endoscopes	1
A 57	ENT	Instrument set for Othorinolaringology	1
A 58	General	Sphygmomanometer, adult, table	5
A 59	General	Sphygmomanometer, table	21
A 60	General	Suction pump, low pressure	15
A 61	General	Surgical minor set	11
A 62	Diagnostic C.	Colposcope	1
A 63	Hemodialysis	Equipment for hemodialysis	4
A 64	Hemodialysis	Equipment for preparation dis. water	1

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## Equipment List for Central Clinical Hospital

ANNEX I

Item No.	Dept.	Equipment Name	Qty.
A 65	ICU	Functional beds	6
A 66	ICU	Infusion pump, volumetric	8
A 67	ICU	Laryngoscope, 3 curved blades	1
A 68	ICU	Monitor ECG/HR/Temp/Respiration	6
A 69	ICU	Oxymeter, pulse	3
A 70	ICU	Resuscitator, manual, adult	10
A 71	ICU	Ventilator volumetric, adult	1
A 72	ICU	Ventilator, adult, mobile	4
A 73	Laparo. C.	Laparoscope surgery set	1
A 74	Ophthalmology	Otho-ophthalmoscope	6
A 75	Operation Theatre	Sterilizer (surgical set cleaner)	1
A 76	Operation Theatre	Abdominal hysterectomy instrument set	2
A 77	Operation Theatre	Abrams pleural biopsy set	1
A 78	Operation Theatre	Anesthetic unit with ventilator	4
A 79	Operation Theatre	Defibrillator/monitor	2
A 80	Operation Theatre	Electrosurgical unit	3
A 81	Operation Theatre	Gall bladder surgical instrument set	2
A 82	Operation Theatre	Gynaecology basic set	1
A 83	Operation Theatre	Instrument set for Urology	1
A 84	Operation Theatre	Intestinal surgical instruments set	1
A 85	Operation Theatre	Lamp, examination, mobile	5
A 86	Operation Theatre	Lamp, surgical batteries, mobile	4
A 87	Operation Theatre	Lamp, surgical, ceiling	4
A 88	Operation Theatre	Laryngoscope, adult	6
A 89	Operation Theatre	Negatoscope, 3 parts	3
A 90	Operation Theatre	Operating table (general)	4
A 91	Operation Theatre	Suction pump, high pressure	6
A 92	Operation Theatre	Suction pump, toracic	2
A 93	Operation Theatre	Surgical instruments set, large	4
A 94	Operation Theatre	Surgical microscope	1
A 95	Operation Theatre	Thyroidectomy surgical instrument set	1
A 96	Operation Theatre	Tracheostomy set	1
A 97	Operation Theatre	Tubal ligation set	1
A 98	Operation Theatre	Vaginal repair & hysterectomy inst. set	1
A 99	Operation Theatre	Vasectomy surgical instrument set	1
A 100	Pathology	Corpses refrigerator, 3 drawers	1
A 101	Pathology	Postmortem instrument set	1
A 102	X-Ray	Dark room light, inactinic filter	2
A 103	X-Ray	Exposimeter, automatic	1
A 104	X-Ray	Fluoroscopic/radiologic unit	1
A 105	X-Ray	Image intensifying TV system	1
A 106	X-Ray	Negatoscope, 2 parts	2
A 107	X-Ray	Negatoscope, 4 parts	2
A 108	X-Ray	Radiologic unit, general examination	1
A 109	X-Ray	X-ray film cassettes (package)	1
A 110	X-Ray	X-ray film processor, manual	1
A 111	X-Ray	X-ray protecting apron	2
A 112	X-Ray	X-ray unit, mobile	1

## Equipment List for Children's Central Clinical Hospital

ANNEX I

Item No.	Dapt.	Description	Qty.
B 1	Blood Bank	Blood bags' seal machine	1
B 2	Blood Bank	Blood refrigerator	1
B 3	Blood Bank	Blood units balance	1
B 4	Blood Bank	Centrifuge for blood bags	1
B 5	Blood Bank	Freezer (-70C)	1
B 6	Blood Bank	Freezer, blood plasma	1
B 7	Central Laboratory	Automatic cell counter	1
B 8	Central Laboratory	Balance, analysis	1
B 9	Central Laboratory	Bilirubinometer	1
B 10	Central Laboratory	Biochemical analyzer	1
B 11	Central Laboratory	Blood gas analyzer	1
B 12	Central Laboratory	Centrifuge, microhematocryt	1
B 13	Central Laboratory	Centrifuge, cyto	1
B 14	Central Laboratory	Centrifuge, for haematocrite	1
B 15	Central Laboratory	Centrifuge, general	1
B 16	Central Laboratory	Centrifuge, serologic	1
B 17	Central Laboratory	Centrifuge, universal	1
B 18	Central Laboratory	Coagulator analyzer, semi-automatic	1
B 19	Central Laboratory	Differential counter	1
B 20	Central Laboratory	Digital colony counter	1
B 21	Central Laboratory	Electrolyte analyzer	1
B 22	Central Laboratory	Electrophoresis unit	1
B 23	Central Laboratory	Incubator, laboratory	1
B 24	Central Laboratory	Magnetic stirrer	1
B 25	Central Laboratory	Microscope, binocular	7
B 26	Central Laboratory	pH-meter	1
B 27	Central Laboratory	Refrigerator, laboratory	1
B 28	Central Laboratory	Spectrophotometer, UV-VIS	1
B 29	Central Laboratory	Staining equipment	1
B 30	Central Laboratory	Urine analyzer	1
B 31	Central Laboratory	Sterilizer, dry	1
B 32	Central Laboratory	Water distiller & deionizing	1
B 33	CSSD	Sterilizer, steam, horizontal	2
B 34	Diagnostic C.	Electrocardiograph, 3 channel	2
B 35	Diagnostic C.	Electrocardiograph, 6 channel	1
B 36	Diagnostic C.	Electroencephalograph, 16 channel	1
B 37	Diagnostic C.	Scale, adult/ped., anthropometric	1
B 38	Diagnostic C.	Scale, infant, antropometric	1
B 39	Diagnostic C.	Spirometer	1
B 40	Diagnostic C.	US probe, abdominal	1
B 41	Diagnostic C.	US probe, cardiology	1
B 42	Diagnostic C.	US scanner, multipurpose	1
B 43	Diagnostic C.	US scanner, portable	1
B 44	Emergency	Trolley, emergency	1
B 45	Emergency	Express laboratory equipment	1
B 46	Endoscopy	Cold light source unit	2
B 47	Endoscopy	Fiberbronchoscope, ped	1
B 48	Endoscopy	Fibercolonoscope, ped	1
B 49	Endoscopy	Fiberduodenoscope, ped	1
B 50	Endoscopy	Fibergastroscope, ped	1
B 51	Endoscopy	Washer, flexible endoscopes	1
B 52	ENT	Instrument set for Othorhinolaryngology	1
B 53	General	Sphygmomanometer, table, adult/ped.	15
B 54	General	Sphygmomanometer, infant, mobile	5
B 55	General	Sphygmomanometer, neonatal, mobile	4
B 56	General	Suction pump, low pressure	12
B 57	General	Surgical minor set	10
B 58	GY.OB	Caesarian set	1
B 59	GY.OB	Colposcope	1
B 60	GY.OB	Delivery table	1
B 61	GY.OB	Gynaecology basic set	1
B 62	GY.OB	Infant incubator, normal	3
B 63	GY.OB	Instrument set for delivery	1
B 64	GY.OB	Instrument set for Obs. & Gyn. Exam/treat.	1
B 65	GY.OB	Operating table (general and cesaria)	1

*5.5 / kpa*

## Equipment List for Children's Central Clinical Hospital

ANNEX I

Item No.	Dept.	Description	Qty.
B 66	GY.OB	Suction pump, gynecological	2
B 67	ICU	Functional beds	3
B 68	ICU	Infant incubator, ICU	3
B 69	ICU	Infant warmer	2
B 70	ICU	Infusion pump, syringe, infant	3
B 71	ICU	Infusion pump, volumetric	4
B 72	ICU	Laryngoscope, 3 curved blades, infant	2
B 73	ICU	Laryngoscope, adult/ped.	1
B 74	ICU	Laryngoscope, ped	1
B 75	ICU	Laryngoscope, straight blade, infant	1
B 76	ICU	Monitor ECG/HR/Temp/Respiration	6
B 77	ICU	Nebulizer ultrasonic	4
B 78	ICU	Oxymeter, pulse	3
B 79	ICU	Resuscitator, manual, adult/pediatric	10
B 80	ICU	Ventilator volumetric, adult	1
B 81	ICU	Ventilator volumetric, infant	2
B 82	ICU	Ventilator volumetric, ped.	2
B 83	ICU	Ventilator, adult/ped.	1
B 84	Laparo. C	Laparoscope for surgery	1
B 85	Ophthalmology	Otho-ophthalmoscope	5
B 86	Operation Theatre	Abdominal hysterectomy instrument set	1
B 87	Operation Theatre	Abrams pleural biopsy set	1
B 88	Operation Theatre	Anesthetic unit with ventilator	3
B 89	Operation Theatre	Defibrillator/monitor	1
B 90	Operation Theatre	Defibrillator, neonatal pads	1
B 91	Operation Theatre	Electrosurgical unit	3
B 92	Operation Theatre	Intestinal surgical instruments set	1
B 93	Operation Theatre	Lamp, surgical batteries, mobile	3
B 94	Operation Theatre	Lamp, surgical, ceiling	2
B 95	Operation Theatre	Negatoscope, 3 parts	2
B 96	Operation Theatre	Operating table (general)	2
B 97	Operation Theatre	Suction pump, high pressure	2
B 98	Operation Theatre	Suction pump, toracic	3
B 99	Operation Theatre	Surgical instruments set, large	3
B 100	Operation Theatre	Surgical microscope	1
B 101	Operation Theatre	Thyroidectomy surgical instrument set	1
B 102	Operation Theatre	Tracheostomy set	1
B 103	Operation Theatre	Tracheostomy set, infant	1
B 104	Operation Theatre	Tubal ligation set	1
B 105	Operation Theatre	Vaginal repair & hysterectomy inst. Set	1
B 106	Operation Theatre	Vasectomy surgical instrument set	1
B 107	Outpatient	Lamp, examination, mobile	3
B 108	Patholgy	Corpses refrigerator, 3 drawers	1
B 109	Patholgy	Postmortem instrument set	1
B 110	X-Ray	Dark room light, inactinic filter	1
B 111	X-Ray	Exposimeter, automatic	1
B 112	X-Ray	Fluoroscopic/radiologic unit	1
B 113	X-Ray	Image intensifying TV system	1
B 114	X-Ray	Negatoscope, 2 parts	1
B 115	X-Ray	Negatoscope, 4 parts	1
B 116	X-Ray	Radiologic unit, general examination	1
B 117	X-Ray	X-ray film cassettes (package)	1
B 118	X-Ray	X-ray film processor, manual	1
B 119	X-Ray	X-ray protecting apron	2
B 120	X-Ray	X-ray unit, mobile	1

## Japan's Grant Aid Program

### 1. Japan's Grant Aid Procedures

(1) The Japan's Grant Aid Program is executed by the following procedures.

Application	(Request made by a recipient country)
Study	(Preparatory Study / Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by the Cabinet of Japan)
Determination of Implementation	(Exchange of Notes between the both Governments)
Implementation	(Implementation of the Project)

(2) Firstly, an application or a request for a project made by the recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to see whether or not it is suitable for Japan's Grant Aid. If the request is deemed suitable, the Government of Japan entrusts a study on the request to JICA (Japan International Cooperation Agency).

Secondly, JICA conducts the Study (Basic Design Study), using a Japanese consulting firm. If the background and objective of the requested project are not clear, a Preparatory Study is conducted prior to a Basic Design Study.

Thirdly, the Government of Japan appraises the Project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study Report prepared by JICA and the results are then submitted to the Cabinet for approval.

Fourthly, the Project approved by the Cabinet becomes official when pledged by the Exchange of Notes signed by the both Governments.

Finally, for the implementation of the Project, JICA assists the recipient country in preparing contracts and so on.

### 2. Contents of the Study

#### (1) Contents of the Study

The purpose of the Study (Preparatory Study/Basic Design Study) conducted on a project requested by JICA is to provide a basic document necessary for appraisal of the project by the Japanese Government. The contents of the Study are as follows:

- a) to confirm background, objectives, benefits of the project and also institutional capacity of agencies concerned of the recipient country necessary for project implementation,
- b) to evaluate appropriateness of the Project for the Grant Aid Scheme from a technical, social and economical point of view,
- c) to confirm items agreed on by the both parties concerning a basic concept of the project,
- d) to prepare a basic design of the project,
- e) to estimate cost involved in the project.

Final project components are subject to approval by the Government of Japan and therefore may differ from an original request.

Implementing the project, the Government of Japan requests the recipient country to take necessary measures involved which are itemized on Exchange of Notes.

(2) Selecting (a) Consulting Firm(s)

For smooth implementation of the study, JICA uses (a) consulting firm(s) registered. JICA selects (a) firm(s) through proposals submitted by firms which are interested. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference made by JICA.

The consulting firm(s) used for the study is (are) recommended by JICA to a recipient country after Exchange of Notes, in order to maintain technical consistency.

(3) Status of a Preparatory Study in the Grant Aid Program

A Preparatory Study is conducted during the second step of a project formulation & preparation as mentioned above.

A result of the study will be utilized in Japan to decide if the Project is to be suitable for a Basic Design Study.

Based on the result of the Basic Design Study, the Government would proceed to the stage of decision making process (appraisal and approval).

It is important to notice that at the stage of Preparatory Study, no commitment is made by the Japanese side concerning the realization of the Project in the scheme of Grant Aid Program.

**3. Japan's Grant Aid Scheme**

(1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non reimbursable funds needed to procure facilities, equipment and services for economic and social development of the country under the following principles in accordance with relevant laws and regulations of Japan. The Grant Aid is not in a form of donation or such.

(2) Exchange of Notes (E/N)

The Japan's Grant Aid is extended in accordance with the Exchange of Notes by both Governments, in which the objectives of the Project, period of execution, conditions and amount of the Grant etc. are confirmed.

(3) "The period of the Grant Aid" means one Japanese fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedure such as Exchange of Notes, concluding a contract with (a) consulting firm(s) and (a) contractor(s) and a final payment to them must be completed.

(4) Under the Grant, in principle, products and services of origins of Japan or the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant may be used for the purchase of products or services of a third country origin.

However the prime contractors, namely, consulting, contractor and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons.)



(5) Necessity of the "Verification"

The Government of the recipient country or its designated authority will conclude into contracts in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. The "Verification" is deemed necessary to secure accountability to Japanese tax payers.

(6) Undertakings required to the Government of the recipient country

In the implementation of the Grant Aid, the recipient country is required to undertake necessary measures such as the following:

- a) to secure land necessary for the sites of the project and to clear and level the land prior to commencement of the construction work,
- b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) to secure buildings prior to the installation work in case the Project is providing equipment,
- d) to ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) to exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(7) Proper Use

The recipient country is required to maintain and use equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for their operation and maintenance as well as to bear all expenses other than those to be borne by the Grant Aid.

(8) Re-export

The products purchased under the Grant Aid shall not be re-exported from the recipient country.

(9) Banking Arrangement (B/A)

- a) The Government of the recipient country or its designated authority shall open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by Government of the recipient country or its designated authority under the contracts verified.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay issued by the Government of the recipient country or its designated authority.

## Necessary Measures to be Taken by the Government of Georgia

To

1. provide data and information necessary for the Grant Aid,
2. secure the site for the Grant Aid,
3. clear, level and reclaim the site prior to commencement of the Grant Aid,
4. undertake incidental outdoor works such as gardening, fencing, gates and exterior lightning in and around the site,
5. provide facilities for distribution of electricity, water supply, telephone, drainage, sewerage and other incidental facilities to the site,
  - (1) electricity distributing line to the site
  - (2) city water distribution main to the site
  - (3) main city drainage to the site
  - (4) telephone trunk line and the main distribution panel of building
  - (5) general furniture such as carpets, curtains, tables, chairs and others
6. bear commissions to the Japanese foreign exchange bank for its banking service based upon the Banking Arrangement (B/A), namely the advertising commission of the Authorization to Pay (A/P) and payment commission,
7. ensure prompt unloading, tax exemption, customs clearance at the port of disembarkation in Republic of Georgia and prompt internal transportation therein of the materials and equipment for the Project purchased under the Grant Aid,
8. exempt Japanese juridical and physical nationals engaged in the Grant Aid from customs duties, internal taxes and other fiscal levies which may be imposed in Georgia with respect to the supply of the products and services under the verified contracts,
9. accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such facilities as may be necessary for their entry into Georgia and stay therein for the performance of their work,
10. provide necessary permissions, licenses and other authorizations for implementing the Grant Aid, if necessary,
11. assign appropriate budget and technical and administrative staff members for proper and effective operation and maintenance of equipment procured under the Grant Aid,
12. maintain and use properly and effectively the equipment procured under the Grant Aid, and
13. bear all the expenses, other than those to be borne by the Japan's Grant Aid within the scope of the Project

**Format of monitoring**

The Ministry of Health of Georgia has the responsibility to evaluate the outcome of the Project by monitoring the activities of the hospitals, and will submit the report to the Japanese side annually (5 years after warranty period). The following indicators will be required to be monitored to evaluate the progress of the Project in term of the inputs from the Government of Georgia.

**A. Hospital Activity:**

Following indicators should be monitored quantitatively.

(1) Funds allocation;	1USD=X.XXGEL
1) Operating cost	GEL/year
2) Maintenance cost	GEL/year
3) Other cost such as consumption of utilities	GEL/year
(2) Human Resource allocation	
1) Number of Doctors	
2) Number of Nurses	
3) Number of Technicians	
(3) Activity	
1) Number of Patients / year (department by department)	
a) XXX department	/year
b) YYY department	/year
c) ZZZ department	/year
2) Number of Operation performed / year	/year
3) Number of Clinical Laboratory Test conducted / year	/year

**B. Equipment**

Major equipment (as following examples) should be monitored quantitatively.

No.	Name of Equipment	Operation cost (consumable, reagent etc)	Frequency of Operation / day	Frequency of Breakdown / month
1	Biochemical Analyzer	GEL/year	/day	/month
2	Blood Gas Analyzer	GEL/year	/day	/month
3	Electrolyte Analyzer	GEL/year	/day	/month
4	Radiological Unit	GEL/year	/day	/month
5	Fluoroscopic- Radiological Unit	GEL/year	/day	/month
6	Ultrasound scanner	GEL/year	/day	/month
7	Hemodialysis	GEL/year	/day	/month
8	EIA Analyzer	GEL/year	/day	/month
9	Laparoscope	GEL/year	/day	/month
10		GEL/year	/day	/month
11		GEL/year	/day	/month
12		GEL/year	/day	/month
13		GEL/year	/day	/month
		GEL/year	/day	/month
XX		GEL/year	/day	/month



資料-5 当該国の社会・経済事情



国名	グルジア共和国
	Republic of Georgia

一般指標				
政体	共和制	*1	首都	トビリシ
元首	Eduard A Shevardnadze	*1	主要都市名	ズミ、クイフ、ルズビ
独立年月日	1991年4月9日	*1	経済活動可人口	3千人 (1995年)*4
人種(部族)構成	グルジア系69%、アブハズ系8%	*1	義務教育年数	9年間 (1997年)*5
	オジス系3%		初等教育就学率	% (年)*5
言語・公用語	グルジア語、アブハズ語	*1	初等教育終了率	% (年)*6
宗教	グルジア正教	*1	識字率	99% (1998年)*7
国連加盟	1992年07月	*2	人口密度	78人/Km <sup>2</sup> (1996年)*1
世銀加盟	1992年08月	*3	人口増加率	-1.0% (1996年)*1
IMF加盟	1996年12月	*3	平均寿命	平均69.09 男63.43 女72.98 *1
面積	69.70千Km <sup>2</sup>	*1	5歳児未満死亡率	(年)*7
人口	541.100千人(1996年)	*1	カロリー供給量	cal/日/人(年)*7

経済指標				
通貨単位		*1	貿易量	(年)*8
為替(1US\$)	1US\$= ( )	*8	輸入	百万ドル *8
会計年度	1月~12月	*1	輸出	百万ドル *8
国家予算	(年)	*9	輸入カバー率	月(年)*10
歳入	百万ドル	*9	主要輸出品目	食料品、鉄鋼 (1995年)*1
歳出	百万ドル	*9	主要輸入品目	石油、衣類、食料品 (1995年)*1
国際収支	百万ドル(年)	*9	日本への輸出	0.8百万ドル 1997年)*11
ODA受取額	百万ドル(年)	*7	日本からの輸入	1.7百万ドル 1997年)*11
国内総生産(GDP)	2,325.00百万ドル(1995年)	*4		
一人当たりGNP	440.0ドル (1995年)	*4	外貨準備総額	百万ドル( ) *8
GDP産業別構成	農業 67.0% (1995年)	*4	対外債務残高	13.0百万ドル(1996年)*10
	鉱工業 22.0% (1995年)		対外債務返済率	% (年)*10
	サービス業 11.0% (1995年)		インフレ率	163.4% (1995年)*7
産業別雇用	農業 % (年)*7			
	鉱工業 % (年)			
	サービス業 % (年)		国家開発計画	*12
経済成長率	-26.9% (1995年)*4			

気象( ~ 年平均)		場所:												(標高 m)
月	1	2	3	4	5	6	7	8	9	10	11	12	平均 / 計	
最高気温													°C *13	
最低気温													°C *13	
平均気温													°C *14	
降水量													mm *13	
雨期乾期														

\*1 CIA World Fact Book 1997-1998  
 \*2 Member States of United Nations  
 \*3 The World Bank Public Information Center, International Financial Statistics Yearbook 1998  
 \*4 World Development Report 1997  
 \*5 UNESCO Statistical Yearbook 1997  
 \*6 Status and Trends 1997  
 \*7 Human Development Report 1998  
 \*8 International Financial Statistics August 1998  
 \*9 International Financial Statistics Yearbook 1997  
 \*10 Global Development Finance 1998  
 \*11 世界の国一覽表 1998年版  
 \*12 最新世界各国要覽 98年版  
 \*13 The Times Book World Weather Guide, Update Edition  
 \*14 理科年表, 国立天文台(1997)

国名	グルジア共和国
	Republic of Georgia

\*15

項目	年度	1993	1994	1995	1996
技術協力		2,892.93	3,087.67	3,256.28	3,461.48
無償資金協力		2,244.22	2,456.48	2,796.65	2,606.79
有償資金協力		3,939.97	4,352.21	3,878.11	3,025.02
総額		9,077.12	9,896.36	9,931.04	9,093.29

\*15

項目	年度	1993	1994	1995	1996
技術協力		0.00	0.04	0.10	0.16
無償資金協力		0.00	0.00	0.00	0.00
有償資金協力		0.00	0.00	0.00	0.00
総額		0.00	0.04	0.10	0.16

\*16

	贈与 (1)	有償資金協力 (2)	政府開発援助 (ODA) (1)+(2)=(3)	その他政府資金 及び 民間資金 (4)	経済協力総額 (3)+(4)
二国間援助 (主要供与国)	87.40	24.80	112.20		112.20
1. アメリカ	55.00	0.00	55.00		55.00
2. ドイツ	8.70	24.90	33.60		33.60
3. オランダ	9.00	0.00	9.00		9.00
4. イタリア	3.70	0.00	3.70		3.70
多国間援助 (主要援助機関)	49.30	156.90	206.20		206.20
1. IMF					
2. IDA					
その他	0.00	0.00	0.00		0.00
合計	136.70	181.70	318.40		318.40

\*17

技術	
無償	
協力隊	

\*15 Japan's ODA Annual Report 1997

\*16 Geographical Distribution of Financial Flows to Aid Recipients 1992-1996

\*17 国別協力情報(JICA)



## 資料6 収集資料リスト

資料名	発行機関	発行年
1 Georgian Health System "Reorientation"	Ministry of Health of Gerogia	1997
2 Legal Acts of Georgia "Health Care"	TECHINFORMI	1998
3 Staff Appraisal Report, Georgia, Health Project	The World Bank	1996
4 Georgia Hospital Restructuring Master Plan	Ministry of Health of Georgia, KAISER PERMANENTE	1998
5 Georgia, A Blueprint for Reforms	The World Bank	1993









JICA