

4 RECORD OF DISCUSSIONS

討議議事録 (R/D)

THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE IMPLEMENTATION
SURVEY TEAM AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT
OF THE HASHEMITE KINGDOM OF JORDAN ON THE JAPANESE
TECHNICAL COOPERATION FOR THE COMPUTER TECHNOLOGY
DEVELOPMENT AND TRAINING CENTRE PROJECT
IN THE HASHEMITE KINGDOM OF JORDAN

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Dr. Kenji Tomita, Special Technical Advisor, JICA, visited the Hashemite Kingdom of Jordan from June 21 to July 1, 1990 for the purpose of working out the details of the technical cooperation program concerning the Computer Technology Development and Training Centre Project in the Hashemite Kingdom of Jordan (hereinafter referred to as "the Project").

During its stay in the Hashemite Kingdom of Jordan, the Team exchanged views and had a series of discussions with the authorities concerned of the Government of the Hashemite Kingdom of Jordan in respect of the desirable measures to be taken by both governments for the successful implementation of the Project.

As a result of the discussions, the Team and the authorities concerned of Government of the Hashemite Kingdom of Jordan agreed, taking account of the provisions of the agreement of technical cooperation between the Government of Japan and the Government of the Hashemite Kingdom of Jordan signed at Amman on 16 July, 1985, to recommend to their respective governments the matters referred to in the document attached hereto.

Amman, June 27, 1990

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Dr. Kenji Tomita
Leader
Implementation Survey Team
Japan International
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Dr. Abdullah Toukan
Secretary General
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The Hashemite Kingdom of
Jordan

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Hashemite Kingdom of Jordan will cooperate with each other in implementing the project for the purpose of developing manpower in the field of computer technology and thus contributing to the socio-economic development of Jordan.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex-1.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex-II through the normal procedures under the Technical Cooperation Scheme of Japan.
2. The Japanese experts referred to in 1 above and their families will be granted in the Hashemite Kingdom of Jordan the privileges, exemptions and benefits as listed in Annex-III and will be granted the privileges, exemptions and benefits no less favourable than those granted to experts of the third countries or international organizations performing similar missions in the Hashemite Kingdom of Jordan.

III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex-IV, through the normal procedures under the Technical Cooperation Scheme of Japan.
2. The articles referred to in 1 above will be the property of the Government of the Hashemite Kingdom of Jordan upon being delivered c.i.f. to the Jordanian authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex-II.

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IV. TRAINING OF JORDANIAN PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Jordanian personnel connected with the Project for technical training in Japan through the normal procedures under the Technical Cooperation Scheme of Japan.
2. The Government of the Hashemite Kingdom of Jordan will take necessary measures to ensure that the knowledge and experience acquired by the Jordanian personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE HASHEMITE KINGDOM OF JORDAN

1. In accordance with the laws and regulations in force in the Hashemite Kingdom of Jordan, the Government of the Hashemite Kingdom of Jordan will take necessary measures to establish the Computer Technology Development and Training Centre (hereinafter referred to as "the Centre") in Amman.
2. In accordance with the laws and regulations in force in the Hashemite Kingdom of Jordan, the Government of the Hashemite Kingdom of Jordan will take necessary measures to secure at its own expense:
 - (1) Services of the Jordanian counterpart and administrative personnel as listed in Annex-V;
 - (2) Land, buildings and facilities as listed in Annex-VI;
 - (3) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III-1 above;
 - (4) Transportation facilities and travel allowance for the Japanese experts for the official travel within the Hashemite Kingdom of Jordan;
 - (5) Suitably furnished accommodations for the Japanese experts and their families;
 - (6) Transportation for the Japanese experts during working hours including transportation between the Centre and their residence.

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3. In accordance with the laws and regulations in force in the Hashemite Kingdom of Jordan, the Government of the Hashemite Kingdom of Jordan will take necessary measures to meet:

- (1) Expenses necessary for the transportation of the articles referred to in III-1 above within the Hashemite Kingdom of Jordan as well as for the installation, operation and maintenance thereof;
- (2) Customs duties, internal taxes and any other charges imposed in the Hashemite Kingdom of Jordan on the articles referred to in III-1 above;
- (3) All the running expenses necessary for the implementation of the Project.

VI. ADMINISTRATION OF THE PROJECT

1. Higher Council for Science and Technology will bear overall responsibility for the implementation of the Project.
2. The Director General of the Centre, as the Head of the Project, will be responsible for the administrative and managerial matters of the Project.
3. The organization chart of the Centre is shown in ANNEX -VI.
4. The Japanese Chief Advisor will provide necessary recommendation and advice on the technical and administrative matters concerning the implementation of the Project.
5. The Japanese experts will give necessary technical guidance and advice to the Jordanian counterpart personnels on matters pertaining to the implementation of the Project.
6. For the effective and successful implementation of the Project, a Joint Committee will be established with the function and composition as referred to in Annex-VII.

VII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Hashemite Kingdom of Jordan undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Hashemite Kingdom of Jordan except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VIII. MUTUAL CONSULTATION

There will be mutual consultation between the two governments on any major issues arising from, or in connection with this Attached Document.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be four (4) years from June 27, 1990.

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ANNEX-I. MASTER PLAN

1. Objectives of the Project

The Project aims at fostering software engineers in the field of computer technology and thus contributing to the socio-economic development of the Hashemite Kingdom of Jordan.

2. Objectives of the Japanese Technical Cooperation

The objectives of the Japanese technical cooperation during the term of cooperation are to transfer necessary knowledge and technique in the field of computer technology to the Jordanian counterpart personnels so as to enable them to carry out the training courses in the Centre.

3. Field of the Japanese Technical Cooperation

The field of the technology transfer will be as follows.

- (1) Programming languages
- (2) Operating system usage
- (3) Database and data communication
- (4) System design
- (5) Project management

Robotic for industrial engineering, development of Artificial Intelligence, Arabization of software and other related field will be excluded from the field of the Japanese technical cooperation.

ANNEX-II. JAPANESE EXPERTS

1. Long-term Experts

- (1) Chief Advisor
- (2) Expert on operating system and computer language
- (3) Expert on database and data communication

2. Short-term Experts

Short-term Experts may be dispatched, when necessity arises, for the smooth implementation of the Project.



ANNEX-III. PRIVILEGES, EXEMPTION AND BENEFITS.

1. The Government of the Hashemite Kingdom of Jordan will grant the Japanese experts exemptions from income tax and charges of any kind imposed on or in connection with the living allowance remitted from abroad.
2. The Government of the Hashemite Kingdom of Jordan will grant the Japanese experts exemptions from customs duties in respect of the importation of personal effects by the Japanese experts and their families as well as the importation of machinery and equipment relating to their activities.
3. The Government of the Hashemite Kingdom of Jordan will provide medical facilities.

ANNEX-IV. LIST OF EQUIPMENT

Machinery and equipment necessary for technology transfer

- (1) Main frame and peripheral equipment
- (2) Personal computers
- (3) Software for main frame and its manual
- (4) Education materials
- (5) Others

ANNEX-V. LIST OF COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Counterpart personnel
 - (1) Head of the Project
 - (2) Operating system and computer language
 - (3) Database and data communication
2. Administrative Personnel
 - (1) Operator (Computer system)
 - (2) Administrative staff
 - (3) Other necessary supporting staff

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ANNEX-VI. LIST OF LAND, BUILDING AND FACILITIES

1. Classrooms and meeting rooms necessary for technology transfer.
2. Buildings, facilities and spaces necessary for the installation and storage of the machinery, equipment and materials provided by the Government of Japan.
3. Office space and necessary facilities for the Japanese Chief Advisor and other experts.
4. Other facilities mutually agreed upon as necessary.

ANNEX-VII. THE JOINT COMMITTEE

1. Functions

The Joint Committee will meet at least once a year and whenever necessity arises, and its functions are:

- (1) To formulate the Annual Work Plan of the Project in line with the Tentative Schedule of Implementation formulated under the framework of this Record of Discussions;
- (2) To review the overall progress of the technical cooperation program as well as the achievements of the above-mentioned Annual Work Plan;
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation program.

2. Composition

(1) Chairman

Secretary General, Higher Council for Science and Technology

(2) Members;

(a) Jordanian side

- (i) Head of the Project
- (ii) Other personnel connected to the Project

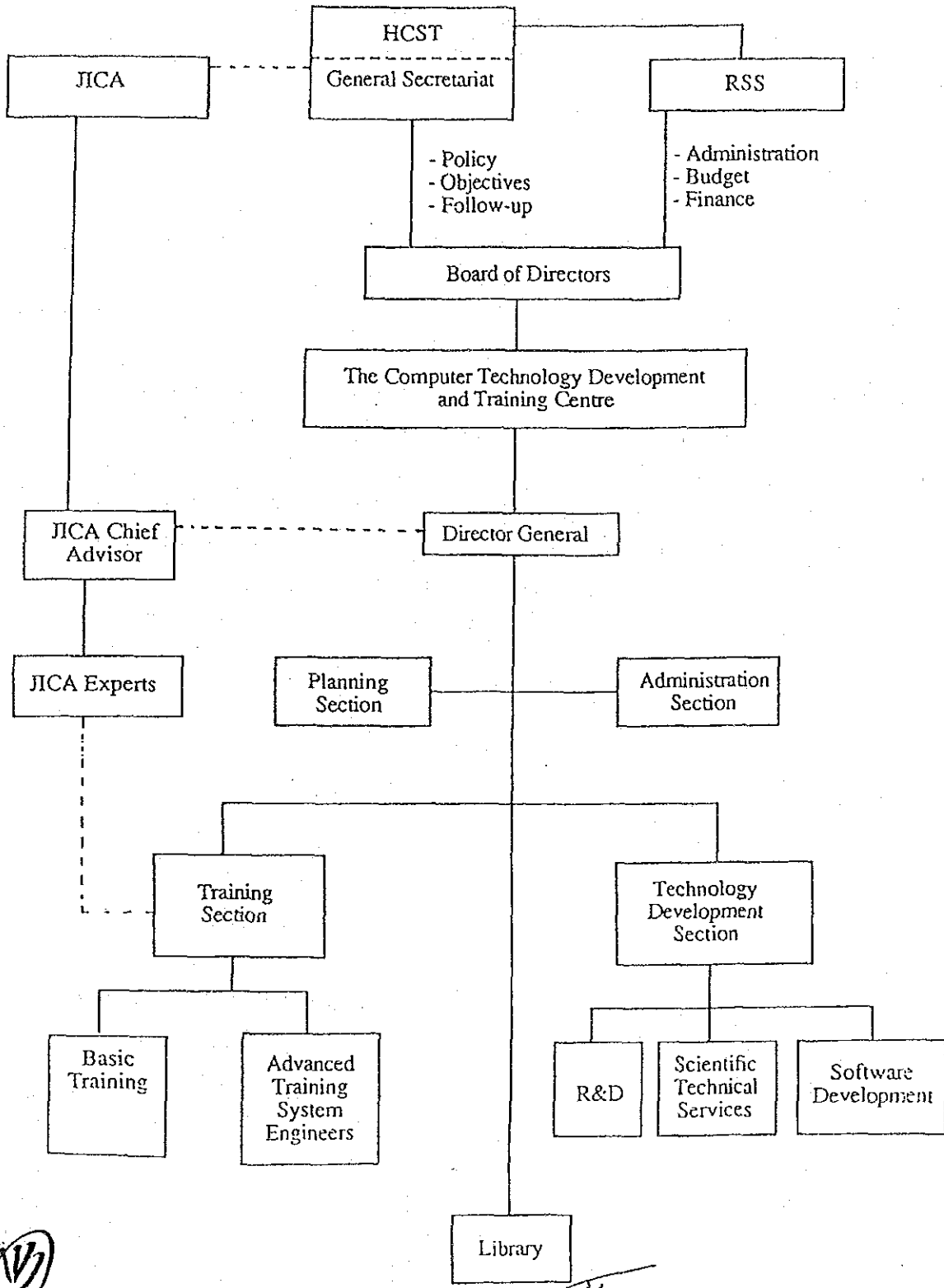
(b) Japanese side:

- (i) Chief Advisor
- (ii) Other experts and personnel concerned to be dispatched by JICA, if necessary

note: Officials of the Embassy of Japan may attend the Joint Committee as observers.

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ORGANISATION CHART OF THE COMPUTER TECHNOLOGY DEVELOPMENT AND TRAINING CENTRE



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暫定実施計画 (T S I)

TENTATIVE SCHEDULE OF IMPLEMENTATION OF THE TECHNICAL
COOPERATION FOR THE COMPUTER TECHNOLOGY DEVELOPMENT
AND TRAINING CENTRE PROJECT IN THE HASHEMITE
KINGDOM OF JORDAN

The Japanese Implementation Survey Team and the Higher Council for Science and Technology jointly formulated the Tentative Schedule of Implementation of the Computer Technology Development and Training Centre Project (hereinafter referred to as "the Project") as attached hereto.

This schedule has been formulated in connection with I-2 of the Attached Document of the Record of Discussions signed between the Japanese Implementation Survey Team and the Higher Council for Science and Technology for the Technical Cooperation on the Project in the Hashemite Kingdom of Jordan on condition that the necessary budget will be allocated for the implementation of the Project, and is subject to change within the framework of the Record of Discussions when necessity arises in the course of the implementation of the Project.

Amman, June 27, 1990

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1. Term of Technical Cooperation

Duration of the Technical Cooperation for the Project will be four (4) years from June 27, 1990.

The cooperation period is to be divided into two stages as below.

(1) 1st stage (Preparation for training courses)

The objective of the Technical Cooperation in the 1st stage is to transfer the necessary knowledge and technology to the Jordanian counterpart so as to enable them to carry out the training courses.

Training curricula and training materials will be also developed in this stage.

(2) 2nd stage (Implementation of the training courses)

The objective of the Technical Cooperation in the 2nd stage is to provide necessary recommendation and advice to the Jordanian counterpart for the effective and successful implementation of the training courses.

Training curricula and training materials will be also revised in this stage.

2. Site of the Centre

The Computer Technology Development and Training Centre located at the Royal Scientific Society, Amman, Jordan.





3. Training Courses

Following training courses will be conducted by the Jordanian counterpart in the 2nd stage.

(1) Senior Programmer Course

(a) Aim:

This course is designed for the personnel who will be a chief programmer.

The aim of this course is to train application programming skills on main frame computers.

(b) Mode of study:

This course will be conducted on a full time basis, for a period of six (6) months.

Lecture, practice, case study and software development workshop would all be a part of the course.

(c) Qualification of trainees:

1. University graduates
2. Graduates of computer science course in community college with two (2) years experience.

(d) Number of trainees:

Maximum 20 persons per class.

(e) Main subject of the course:

1. Programming language
2. Fundamentals of operating system and hardware system
3. Usage of operating system and timesharing system
4. Development of database programs and data communication programs on main frame computer
5. Program design and documentation technique
6. Software development workshop

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(2) System Engineer Course

(a) Aim:

This course is designed for the personnel who will be a project leader. The aim of this course is to train system analysis, system design, system installation and system development.

(b) Mode of study

This course will be conducted on a full time bases, for a period of six (6) months.

Lecture, practice in group and system development workshop would all be a part of the course.

(c) Qualification of trainees:

1. University Graduates with 3 years practical programming experience.
2. Graduates of Computer Science Course in university
3. Graduates of Senior Programmer Course in the Centre

(d) Number of trainees:

Maximum 20 persons per class.

(e) Main subject of the course:

1. System analysis
2. Database design and creation
3. Data Communication system design and creation (including local area network)
4. Project management simulation
5. System development workshop

(3) Short term courses

Other necessary short term courses corresponding to the local and regional needs.





4. TENTATIVE SCHEDULE OF IMPLEMENTATION

Stage	1st stage		2nd stage		
	1990	1991	1992	1993	1994
Year (calendar) Implementation schedule I. Term of technical cooperation II. Japanese side 1. Long term experts 1) Chief advisor 2) Operating system and computer language 3) Database and data communication 2. Short term experts 3. Provision of machinery and equipment 4. Training of Jordanian counterpart personnel in Japan					
	(Short-term Experts may be dispatched when necessity arises) ▽ Start of Operation △ Delivery				
	3 or 4 Jordanian counterpart personnel may be accepted annually for the technical training in Japan.				

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Stage	1st stage				2nd stage		
	1990	1991	1992	1993	1994		
III. Jordanian side 1. Establishment of the Centre 2. Renovation of the building 3. Arrangement of the facilities 1) Classrooms and meeting rooms 2) Facilities and spaces necessary for the installation and storage of the machinery, equipment and materials provided by the Government of Japan. 3) Office facilities and other necessary facilities for the Japanese experts. 4. Provision of counterparts 1) Head of the Project 2) Operating system and computer language 3) Database and data communication 4) Administrative personnel (Administrative staff and other necessary supporting staff) 5. Training courses 1) Senior Programmer Course 2) System Engineer Course 3) Short Term Courses	—	—	—	—	—	—	—

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5. ANNUAL WORK PLAN FOR 1990 - 1991 (Jun. 1990 - Mar. 1991)

Year (calendar)	1990						1991		
	7	8	9	10	11	12	1	2	3
Month									
I. Japanese side									
1. Preparation for dispatch of Japanese experts									
2. Preparation for provision of machinery and equipment									
3. Training of Jordanian counterpart personnel in Japan									
1) Group Training (Instructor)									1 person
2) Group Training (System Engineer B)									1 person
II. Jordanian side									
1. Establishment of the Centre									
2. Renovation of the building									
3. Arrangement of the facilities									
1) Classrooms and meeting rooms									
2) Facilities and spaces necessary for the installation and storage of the machinery, equipment and materials provided by the Government of Japan									
3) Office facilities and other necessary facilities for the Japanese experts									
4. Recruitment of the counterpart									
1) Head of the Project									
2) Operating system and language									
3) Database and data communication									

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討議議事録覚書 (M/M)

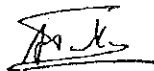
THE MINUTES OF MEETING ON THE RECORD OF DISCUSSIONS
BETWEEN THE JAPANESE IMPLEMENTATION SURVEY
TEAM AND THE HIGHER COUNCIL FOR SCIENCE AND
TECHNOLOGY OF THE HASHEMITE KINGDOM
OF JORDAN ON THE JAPANESE TECHNICAL
COOPERATION FOR THE COMPUTER
TECHNOLOGY DEVELOPMENT AND
TRAINING CENTRE PROJECT

The Japanese Implementation Survey Team and the Higher Council for Science and Technology of the Hashemite Kingdom of Jordan signed the Record of Discussions (hereinafter referred to as "the R/D") on the technical cooperation for the Computer Technology Development and Training Centre Project (hereinafter referred to as "the Project"). This Minutes of Meeting is intended to record the understandings reached between both sides concerning the provisions in the R/D.

Amman, June 27, 1990

富田 肇二

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Leader
Implementation Survey Team
Japan International
Cooperation Agency
Japan



Dr. Abdullah Toukan
Secretary General
Higher Council For Science
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The Hashemite Kingdom
of Jordan

1. As for the Establishment of the Computer Technology Development and Training Centre (hereinafter referred to as "the Centre") referred to in V-1 of the Attached Document of the R/D, the Jordanian side confirmed that the Centre would be established in Amman by the end of September, 1990. At the same time, the Jordanian side will inform the Japanese side of the organization chart of the Centre and names of the Director General and other related personnel.
2. Both sides agreed that the Japanese experts, dispatched under II-1 of the Attached Document of the R/D, would use English on their technology transfer, and the technical training in Japan to the Jordanian personnel under the Attached Document IV-1 of the R/D, would be also given in English.
3. As for the land, building and facilities, the Jordanian side agreed to prepare the following with adequate air conditioning in the terminal rooms, and power supply by the end of May, 1991.
 - 1) Seminar room (two rooms, approx. 100m² each).
 - 2) Study room for workshop (four rooms, approx. 40m² each).
 - 3) Terminal room (two rooms, approx 100m² each).
 - 4) Japanese expert's room (two rooms on the 1st floor approx. 30m² each).
 - 5) Computer room (approx. 200m² including approx. 100m² for the Project).
 - 6) Spare parts room (approx. 25m²).
 - 7) Storage room (approx. 40m²).
 - 8) Other necessary rooms.

The room layout of the ground floor is shown in Annex - D and the Jordanian side confirmed to submit the plans of 1st and 2nd floor to the Japanese side by the end of July 1990.

4. As for the machinery and equipment necessary for the technology transfer referred to in Annex-IV of the Attached Document of the R/D, the Japanese side expressed that the equipment listed in Annex - A of the Minutes of Meeting would be considered on the condition that the necessary budget would be allocated by the Government of Japan.
5. Both Sides agreed that the measures specified in Annex - B of the Minutes of Meeting should be taken by both Governments for the smooth installation and operation of the computer system.

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6. Both sides confirmed the building requirement of Computer room as shown in Annex - C.
7. Both sides confirmed computer equipments and PCs layout as shown in Annex - E.
8. The Jordanian side agreed that through the normal procedures under the Technical Cooperation Scheme of Japan referred to in II-1, III-1 and IV-1 of the Attached Document of the R/D, the following documents would be submitted to the Embassy of Japan in the Hashemite Kingdom of Jordan for the Japanese fiscal 1990 year.
 - 1) A-1 Form for the Japanese long-term experts (Chief advisor, Expert on operating system and computer language, Expert on database and data communication) will be submitted by the end of November, 1990.
 - 2) As for the equipment to be requested, A-4 Form will be submitted by the end of July, 1990.
 - 3) As for the technical training in Japan to counterparts for the Japanese fiscal 1990 year, A-2 and A-3 Form for five (5) persons will be submitted as follows:
 - (a) One (1) for Group Training in Information Processing Personnel System Engineer (B) for Senior System Analyst/Designer; A-2,3 Form should be submitted no later than 27 July, 1990.
 - (b) One (1) for Group Training Course in Information Processing Personnel System (Instructor); A-2,3 Form should be submitted no later than 27 July, 1990.
 - (c) Three (3) for Maintenance Technique for machinery and equipment; A-2,3 Form should be submitted the end of January 1991.
9. Jordanian side agreed that the training materials provided by the Government of Japan and the copy of those materials would be utilized only for the implementation of the training courses in the Centre.
10. The Jordanian side confirmed that the renovation work of the Centre would be completed by the end of December 1990.
11. It is noted that the Jordanian side will carry out in the Centre software development and research in the field of Information Technology at own responsibility and without requesting technical assistance from the Japanese side.

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Annex A

LIST OF EQUIPMENT

Name of equipment	Quantity	Remarks
<i>I. Hardware:</i>		
1. Central processing unit	1	
2. Main memory	1	48MB
3. Magnetic disk unit	3	over 6GB
4. Magnetic tape unit	2	6250/1600BPI
5. Line printer	1	at least 1000 LPM
	* 1	at least 600 LPM
6. Personal computer (terminal)	42	
(stand alone)	8	
(stand alone)	* 10	For short term courses
7. Serial printer (PC)	20	
(PC)	* 3	For short term courses
8. Local area network	-	For CPU and PCs in Terminal rooms
9. Maintenance parts, tools	1 set	
<i>II. Software:</i>		
1. Software (Main Frame)	1 set	- Operating system (Unix and other operating system under virtual machine environment) - Languages processor - Relational database - Data communication
2. Software manual	2 sets	
<i>III. Training materials:</i>		
1. Education material	2 sets	
2. Project management training tool	*8 sets	
<i>IV. Others:</i>		
1. Air conditioner	2	
2. Isolation transformer	1	
3. Power cables	1 set	

Note: Above equipment will be considered as the first priority except for *

Annex B. Allocation of Expenditure for Computer Installation and Site Preparation.

		Allocation of Expenditure	
		Jordan	Japan
1.	Maintenance Engineer		
	(a) Recruitment of engineers (3 persons)	X	
	(b) Training for engineers in Japan		X
2.	Transportation of equipment and materials		
	(a) From Japan to port of Jordan (Aqaba)		X
	(b) From port of Jordan to the Centre	X	
3.	Installation and adjustment		
	(a) Dispatch of supervisor for unpacking, installation and adjustment		X
	(b) Unpacking and installation personnel	X	
	(c) Recruitment of operators (2 persons)	X	
	(d) Training for operators		X
4.	Boundary of installation		
4.1	Power supply		
	(a) Cabling materials from commercial power to UPS (uninterruptible power system)	X (existing)	
	(b) Cabling materials from UPS to isolation transformer		X
	(c) UPS	X (existing)	
	(d) PDBs (power distribution boards)	X	
	(e) Cabling materials from back up Generator to UPS	X (existing)	
	(f) Isolation transformer in computer room to eliminate the external electrical noise (3 phases 4 wire 380V 60KVA)		X
	(g) Cabling materials from isolation transformer to PDB		X
	(h) Grounding electrode for computer and its wiring to PDB	X	
	(i) Cabling materials from PDB of computer room to two PDBs of terminal rooms		X
	(j) Cabling materials for secondary wiring from PDB to computer equipment in computer room		X
	(k) Cabling materials from PDBs to terminal equipment in terminal rooms (Cable, cable protector, receptacles, plugs)	X	

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		Allocation of Expenditure	
		Jordan	Japan
	(l) Installation works of above (a) - (k)	X	
	(m) Installation of power outlet for general electricity	X	
4-2	Signal cables		
	(a) Signal cable materials in computer room -Signal cables from CPU to i/o equipment		X
	(b) Signal cables from terminal controller in computer room to terminal equipment		X
	(c) Signal cable materials for Local Area Network (LAN) from computer to training terminals		X
	(d) Wiring planning of above (b) - (c) including trunking	X	
	(e) Trunking or conduit materials	X	
	(f) Installation works of above (a) - (e)	X	
4-3	Floor construction		
	(a) Materials for raised floor in computer room	X	
	(b) Floor surface materials for anti-static electricity in computer room and terminal rooms	X	
	(c) Raised floor plan	X	
	(d) Plan of cutting of floor panels and additional pedestals' location for computer installation, cabling and cooling		X
	(e) Construction of above (a) - (d)	X	
4-4	Air conditioner		
	(a) Underfloor blower type in computer room		X
	(b) Regular type in two terminal rooms	X	
	(c) Installation works of above (a) - (b)	X	
	(d) Maintenance of above (a) - (b)	X	
4-5	Fire extinguisher		
	-Portable Halon-gas fire extinguisher eight (8) sets of two (2) kg contents	X	
4-6	Layout plan of computer equipment		
	- Detailed specifications and layout plan of hardware/equipment		X

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		Allocation of Expenditure	
		Jordan	Japan
4-7	Fixture of computer room (recommendable)		
	(a) Fireproof safe for master magnetic tape/floppy disk	X	
	(b) Storage cabinet for magnetic tape, floppy disk, paper etc.	X	
	(c) Carrier for magnetic tape, paper, etc.	X	
	(d) Desks and chairs for debugging and operator	X	
	(e) White boards	X	
	(f) Schedule white boards	X	
	(g) Others	X	

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Annex C. Building Requirement for Computer Room

1. Requirements for computer room

1-1 Sub-floor

- (a) Sub-floor strength
300 to 500 kg/m² or more
If existing building, should be able to bear the weight of the raised floor and the computer system.
- (b) Sub-floor dustproof painting if concrete surface.

1-2 Raised floor

- (a) Raised floor height; 300mm ± 30mm
- (b) Loading capacity; (2000 kg for 4 panels)
Panel Flexure for concentrated load of 500 kg to be 1.5 mm or less.
- (c) Anti-static material for surface of raised floor panel (surface resistance; 10⁹ to 10⁶ Ω cm or less)
- (d) Slope ratio; less than or equal 1/5
- (e) Cutout panels and additional pedestals

1-3 Ceiling height; at least 2.3 m (from raised floor surface)

1-4 Lighting; 600 to 400 lux (85 cm above the floor) is desirable.

1-5 Accoustical treatment is desirable.

1-6 Maintenance power point; 5 outlets or more for adjustment and maintenance.

1-7 Fire protection; Halon gas extinguisher.

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2. Air conditioning

2-1 Temperature and humidity range for computer equipment

(a) In operation

Dry bulb temperature; 15 to 30°C

Relative humidity; 45 to 70%

(b) Out of operation

Dry bulb temperature; 5 to 40°C

Relative humidity; 30 to 75%

Maximum wet bulb temperature; 26°C or less

2-2 Temperature and humidity design while in operation

(a) In-room air conditioning system

In-room temperature / humidity

(Specified around the outlet of the equipment)

Summer; 24±2 °C, 45%

Winter; 21 ±2 °C, 45%

(b) Underfloor blower system

Underfloor blower temperature and humidity

(Specified at the blower outlet under floor)

All season; 18 ± 1 °C, 65 ± 5%

In-room temperature / humidity

Summer; 24 °C, 45% to 70%

Winter; 21 °C, 45% to 70%

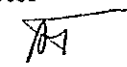
2-3 Dust

Floating dust; 0.07 mg/m³ or less

2-4 Detector for temperature and humidity

2-5 Recorder for temperature and humidity

2-6 Water leak prevention and leak detector





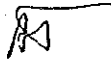
3. Power supply

- 3-1 Output voltage at PDB;
380/220V \pm 10% 3 phases and Neutral
- 3-2 Frequency; 50Hz \pm 1%
- 3-3 Voltage wave form distortion factor
(Harmonic content)
within 5%
at 50% linear load and 50% rectification smoothing load
- 3-4 Ground for computer
A grounding electrode of ground resistance 10 Ω or less
- 3-5 Main grounding wire size;
38 mm² or more
- 3-6 Uninterruptible power system
60 KVA
- 3-7 Power distribution board
 - (a) Branch circuits (circuit breakers)
 - (b) Monitoring instruments, and grounding terminal of power supply

4. Security (recommendable)

- 4-1 Fire protection
 - (a) Automatic fire alarm system
 - (b) Fire extinguisher
- 4-2 Water leakage protection
- 4-3 Security guard system
- 4-4 Rats banishment

Note: All building specification in this Annex should be in line with the Local Building Control Regulations.

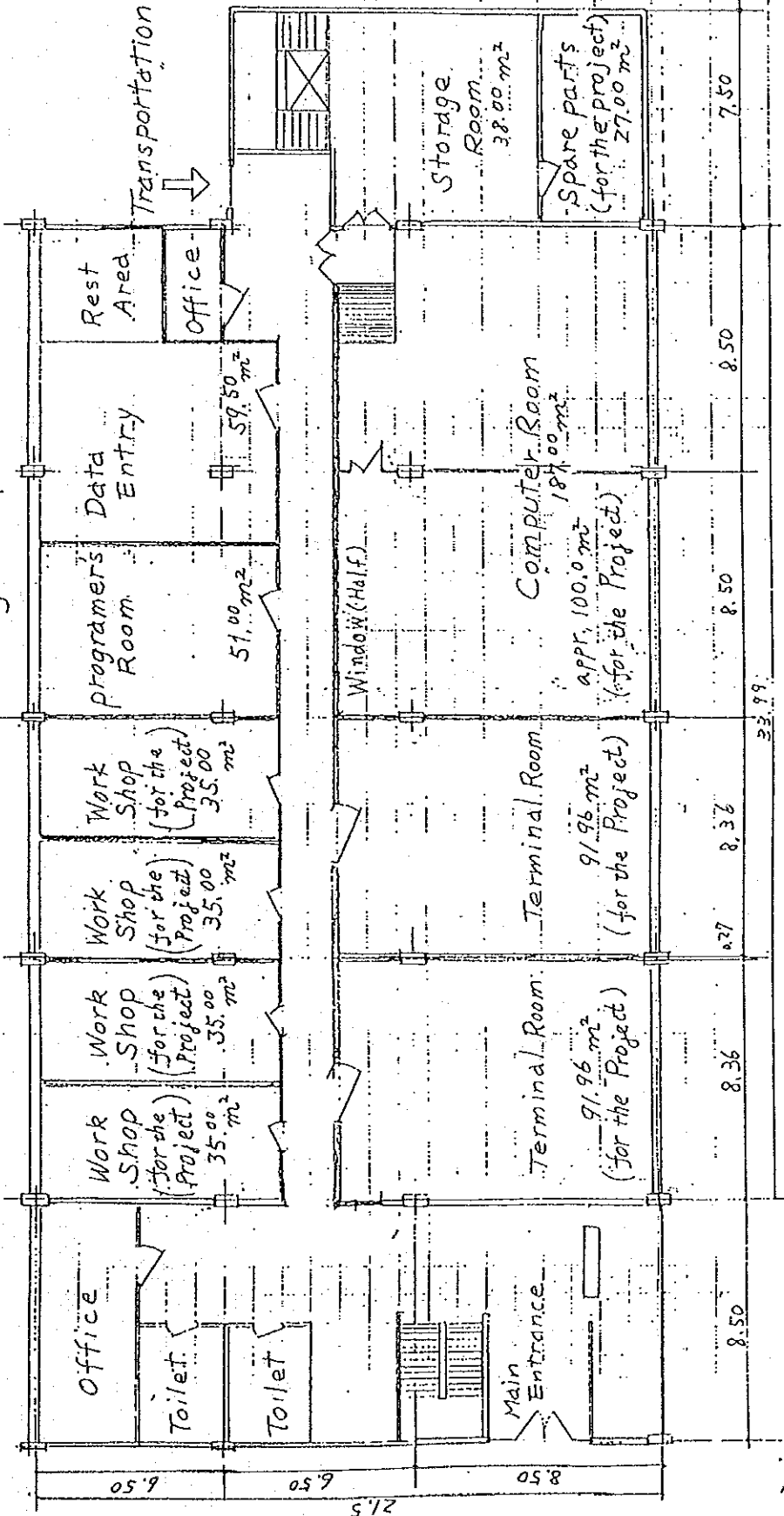




ANNEX-D

The Computer Technology Development and Training Centre Ground Floor Layout Plan

unit: meter

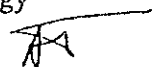


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ANNEX- F

List of Participants

- I. Japanese side
1. Implementation Survey Team
- (1) Dr. Kenji TOMITA Leader
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- (2) Mr. Koji YAMAMOTO Information Technology
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- (4) Mr. Taneje YOSHIDA Equipment Planning
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- (5) Mr. Kenzo SHISUI Facilities Planning
Center of the International Cooperation for
Computerization.
- (6) Mr. Hiroshi HARUKI Education and Training Planning
Center of the International Cooperation for
Computerization.
- (7) Mr. Hiroshi KURAKATA Project Management
Technical Cooperation Division,
Mining and Industrial Development Cooperation
Department, JICA
2. Embassy of Japan
Mr. Tetsuro AMANO Second Secretary
Embassy of Japan in the Hashemite Kingdom of
Jordan.
- II. Jordanian side
- (1) Dr. Ghassan MUFLEH Director, Information Technology Sector,
The Higher Council for Science and Technology
- (2) Dr. Yousef NUSSEIR Director, Information and Computer
Software Center, Royal Scientific Society
- (3) Miss Muna IDRIS Research Assistant.
The Higher Council for Science and Technology





5 日本側専門家派遣実績

長期専門家

No.	専門家名	分野	派遣期間	所属先
1.	岩崎 晋	チーフアドバイザー	'91 .10.31-'94 .06.28	C I C C
2.	里 保徳	オペレーティングシステム&コンピュータ言語	'91 .10.31-'94 .06.28	C I C C
3.	上原 哲	データベース&データコミュニケーション	'91 .12.12-'93 .12.11	富士通(株)
4.	村上 剛	業務調整	'92 .05.11-'94 .06.28	J I C A

短期専門家

No.	専門家名	分野	派遣期間	所属先
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3.	赤松 啓司	施設(システムインストレーション)	'92 .04.16-'92 .05.04	大崎電気(株)
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5.	加藤 敦己	カスタマエンジニア	'92 .04.23-'92 .05.29	富士通(株)
6.	青山 昌裕	システムエンジニア	'92 .05.07-'92 .05.23	富士通(株)
7.	海老原 孝則	システムエンジニア	'92 .05.07-'92 .05.23	富士通(株)
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JICA