

### 5-3 評価の総括

本プロジェクトの目的はすでに各所で述べたとおり、「中国において特許情報検索用教育システムを開発するための技術協力を通じて特許情報管理の分野の人的資源を開発し、もって特許情報の管理及び経済効率の向上に資することを目的とする」となっており、その協力分野として、R/D 署名締結時、日中双方で確認した以下の(1)～(5)の5項目の協力分野について中国人がパートに技術指導と助言を行うこととなっている。

- (1) 特許情報、特許情報検索及びコンピュータに係る基礎訓練。
- (2) 特許情報検索に係る教材の開発。
- (3) 特許情報検索用システム設計及びプログラム作成。
- (4) コンピュータの運営、管理。
- (5) 特許情報検索の運営、管理。

#### 5-3-1 協力分野の達成について

1) 1990年7月終了時評価では、日中双方の合同評価により上記5項目の協力分野について具体的な技術移転進捗状況を次のとおり確認した。

- (1) 「特許情報、特許情報検索及びコンピュータに係る基礎訓練」の項目は終了した。
- (2) 「特許情報検索に係る教材の開発」の項目はほぼ終了したが、なお不十分な部分(漢字処理、TEX等)については更に指導を必要とする。
- (3) 「特許情報検索用システム設計及びプログラム作成」の項目は、システム設計がほぼ終了したものの、プログラム作成、テスト及び評価は未実施であり、協力期間内の終了は不可能である。
- (4) 「コンピュータの運営、管理」の項目は、狭義のコンピュータの運営、管理は終了したが、付随した事項としてシステム生成及びシステムチューニング等は未終了である。但し、本年10月迄には終了の見込みである。
- (5) 「特許情報検索の運営、管理」の項目はシステムが未完成の為、指導は未実施である。

以上のとおり、(1)は終了しており(2)、(4)は協力期間内には終了の見込みである。しかし、(3)は協力期間内には終了の見込みはなく、(3)の完了後に実施すべき(5)もこの関係で終了しない。

2) 技術移転遅延の原因としては先に5-1節で述べたとおり、①コンピュータ室未整備によるコンピュータ供与機材の設置の遅れ、②天安門事件にともなう専門家の本邦への一時避難帰国による協力の中断(プロジェクトの中断)、及び③開発システム規模の過大があげられる。

①及び②はやむをえないとして、③については一考を要する。

本プロジェクトは実用に供する特許情報検索システムを開発するのが目的ではなく、これを自力で行ないうる能力をもった人材を育成するのが目的である。

日本側の投入はこの線に沿って計画され、協力期間も4年間で充分と設定されたものである。

しかし、中国側は、人材育成に重点をおくより、むしろシステムを開発し、これを実際の特許情報検索業務に活用したいとする強い希望をもっていた。

従って、日本側の投入がどうであろうとも、また日本人専門家の指導方針と異なっても、場合によっては自分たちだけで開発を完成させたいとの強い意向を示して、大規模な計画を策定し、実用システムの開発を目指した。

日本側としては巡回指導チーム及び計画打合せチームがその都度、中国側に対してR/Dの基本合意事項に基づいて本来の姿に戻すよう説得したが、中国側は、以下のように人材育成については理解を示したものの、手段として開発するシステムが、結果として実用にならない限り意味はないとして、規模縮少には応じなかった。

「特許情報検索の実用システムの開発は中国側の責任において実施することとし、双方は、特許情報検索システムの開発に必要とされる技術の修得という点を念頭におき、協力期間内にテストまでの工程が実習可能となるようなシステムのターゲットを設定する。」

- 3) 1989年11月プロジェクトの再開、1989年12月供与機材据付完了したことを受けて、日本側は人材育成の思想を貫くため、実機実習期間の短縮の影響を最小限にとどめるために、特許情報検索パイロットシステムの開発をカウンターパートを指導しつつ完成させた。このシステムは、小さくとも実際の特許情報検索が可能な最小限のシステムであり、これを開発することにより、短期間で効果的な技術の習得が可能となるよう設計されたもので、これにより、カウンターパートは検索システムの基礎技術をひとつお習得した訳である。とはいえ、コンピュータ実機を使った実習はようやく1990年1月から出来るようになった事実もあり、パイロットシステムで検索システムのひとつおりの作業を実習したと言っても、全般的に、実機上での実習はまだ不足している。

#### 5-4. 取るべき措置

##### 5-4-1 フォロアップ協力の理由及び具体的規模内容

中国側は、本プロジェクトが1990年10月までの協力期間で終了した場合、当該プロジェクトがR/Dで設定した目標と目的は実現することができないとして、本プロジェクト終了後、1年間のフォロアップによる日本側の援助の継続を希望した。

日本側としては、5章、5-3-1の日中合同評価の未完部分の技術移転を行うことにより、R/Dにある本プロジェクトの協力の目的は達成できると判断し、それに必要な協力期間としてR/Dの協力期間1990年10月末日終了時後、1991年4月30日迄の6ヶ月間フォロアップ協力を行うこととし、日中双方はこれを合意した。本プロジェクト協力により、中国側が目指す実用的な検索システム開発は、フォロアップ協力の終了後、中国人カウンターパートが独力で完成させることができると判断される。

また日中双方は本合同評価結果を討議議事覚書及びジョイントレビュー報告書に取纏め、これらを確認し署名合意した。

(1) M/Mの主要内容は以下のとおりである。

##### 1) フォロアップ協力で技術移転する範囲

システム設計及びプログラム作成に係る技術移転の範囲(モデルシステム開発)

- ① マスクファイル作成 : 抄録マスク、キーワードマスクの作成
- ② 検索ファイル作成 : キーワード検索ファイルの作成
- ③ 検索プログラム作成 : FIND命令による検索の実現
- ④ 検索結果出力作成 : 端末画面及びプリンタへの結果出力

2) 日中双方のとりべき措置 (R/D記載のものその他)

- ① 中国側は モデルシステム開発の為、12人～16人のカウンターパートを人員配置をする。
- ② モデルシステム開発に日本人専門家を措置する、開発のための使用言語はCOBOL とする。中国人カウンターパートは必要ならばアセンブラ を使用してもよい。
- ③ プロジェクトにシステム開発進捗管理委員会を設置する。

委員会はシステム開発の進捗を評価し、技術移転の範囲の達成に効果的な措置としてカウンターパートへ必要な助言を行う。

委員長	日本人チーフリーダー (チーフアドバイザー 田村敏朗)
副委員長	中国人カウンターパートの長 (自動化工作部部長 楊采良)
委員	日本人専門家 (長期専門家及び短期専門家) 中国専利局自動化工作部プロジェクト管理グループ その他

3) 機材供与

(中国側要求の機材供与)

- ① ソフトウェア VOS1/ESのパッチアップ(3版→5版) 及び IEX
- ② CPU メモリ増設 (4MB→8MB)

これに対し、日本側は中国側の要求に応じるよう最大の努力をする旨答えた。

5-4-2 討議議事覚書及びジョイントレビュー報告書他

- (1) 討議議事覚書
- (2) ジョイントレビュー報告書
- (3) 年次活動計画 (1990年 7月終了時評価調査確認) : (参照 : 表-13)

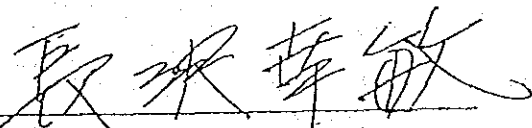
THE MINUTES OF MEETING  
BETWEEN THE JAPANESE EVALUATION SURVEY TEAM  
AND THE CHINESE PATENT OFFICE ON  
THE EDUCATION SYSTEM DEVELOPMENT PROJECT  
FOR CHINESE PATENT INFORMATION RETRIEVAL

The Japanese Evaluation Survey Team (hereinafter referred to as "the Team"), organized by the Japan International Cooperation Agency (hereinafter to as "JICA") and headed by Mr. Yukitoshi Nagasawa, Director, Technical Cooperation Division, Mining and Industrial Development Cooperation Department, JICA, visited the People's Republic of China from 10 - 17 July, 1990 for the purpose of evaluating the achievements of technical cooperation for the Education System Development Project for Chinese Patent Retrieval in the People's Republic of China (hereinafter referred to as "the Project"), and discussing the issues involved in the implementation of the Project with the authorities concerned of the People's Republic of China.

During its stay in the People's Republic of China, the Team observed the project sites, exchanged views and had a series of discussions with the Chinese authorities concerned in respect of the project activities and the attainment of the project objectives.

As a result of close examination and discussions both parties agreed to recommend to their respective governments that the period of technical cooperation as stipulated in the Record of Discussions signed on August 8, 1986 be followed up until April 30, 1991 and that technical cooperation be carried out in accordance with the attached Tentative Schedule of Implementation in order to fully achieve the objectives which were set up in the said Record of Discussions.

Beijing, July 16, 1990

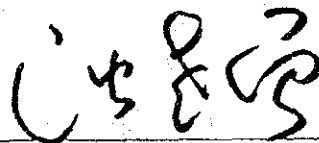


Mr. Yukitoshi Nagasawa

Leader,

Japanese Evaluation Survey Team,

JICA



Mr. Shen Yaozeng

Leader,

Chinese Evaluation Survey Team,

The Chinese Patent Office

The People's Republic of China

ATTACHMENT

TENTATIVE SCHEDULE OF IMPLEMENTATION

1. WORK PLAN

Fildes	Fiscal Year	
	1 9 9 0	1 9 9 1
1. Fundamental training on Patent Information and Patent Information Retrieval and Computer.	(End in 1988)	
2. Developing training Materials of Patent Information Retrieval.	Oct. 31	
3. System design and Programming for Patent Information Retrieval.		Apr. 30
4. Operation and Management of Computer.	Oct. 31	
5. Management and Application of Patent Information Retrieval.	Oct. 31	

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2. TECHNICAL COOPERATION PROGRAM

Fiscal Year		1 9 9 0		1 9 9 1	
Item					
Term of Cooperation	Nov. 1 '86		Oct. 31	Apr. 30	
		Orl	Final R/D	Follow	-up
<u>Japanese side</u>					
I. Dispatch of Japanese Experts					
1. Long-term Experts					
(1) Chief Advisor				Apr. 30	
(2) Expert in the field of Management and System Analysis			Oct. 31		
(3) Expert in the field of System Engineering and Programming				Apr. 30	
2. Short-term Experts					
(1) System Development					
a. Programming		—			
b. Testing			—		
(2) Equipment Installation		—			
II. Provision of the Equipment					
		—			

Notes : Short-term Experts may be dispatched when necessity arises.

Cy

Item	Fiscal Year	
	1 9 9 0	1 9 9 1
<u>Chinese side</u>		
I. Provision of necessary number of Counterparts		
1. System Management		
2. System Analysis		
3. System Engineering		
4. Programming		
5. Others ( Administrative Personnel )		
II. Accommodations for the Japanese Experts		APR. 30

(4)

3. The scope of technology transfer in the follow up cooperation

The technology transfer from the Japanese experts to their counterparts related to the system design and programming for the model patent information retrieval system will cover the following items:

- (1) An abstract master and a keyword master
- (2) A keyword inverted file
- (3) "Find" command to be used in retrieval
- (4) Output on screen and prints of the results

4. The measures to be taken by the Japanese and the Chinese sides

- (1) The Chinese side will assign 12~16 qualified counterparts exclusively for the development of the said model system.
- (2) In the guidance and training provided by the Japanese experts on the model system development, the language to be employed will be COBOL. The Chinese counterparts may employ Assembler if necessary.
- (3) The progress management committee shall be organized in the Project, which aims to evaluate the progress of the system development from time to time and give necessary advice to the counterparts on the effective measures in carrying out their activities.

The committee will consist of the following members:

Chairman                      Japanese team leader

Dputy chairman            Head of Chinese counterparts

Members

1. Japanese experts (long and short-term)
2. Group members of Project Management, Department for Automation, Chinese Patent Office
3. Others



5. Equipment

The Chinese side requested the provision of ① VOS1/ES (Version 5) and IEX; and ② Expansion of memory capacity of the CPU from 4 MB to 8 MB.

The Japanese side answered that they would make the best efforts to comply with the Chinese request.



JOINT EVALUATION REPORT

ON

TECHNICAL COOPERATION PROJECT

FOR

THE EDUCATION SYSTEM DEVELOPMENT FOR CHINESE PATENT INFORMATION RETRIEVAL

IN THE PEOPLE'S REPUBLIC OF CHINA

JULY 1990

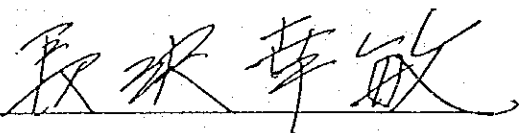
BEIJING, THE PEOPLE'S REPUBLIC OF CHINA

Mutually attested and submitted

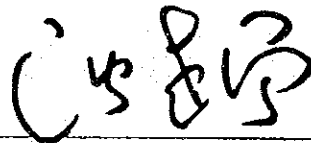
to all concerned

Beijing, The People's Republic of China

July 16, 1990



Mr. Yukitoshi Nagasawa  
Leader,  
Japanese Evaluation Survey Team,  
JICA



Mr. Shen Yaozeng  
Leader,  
Chinese Evaluation Survey Team,  
The Chinese Patent Office  
The People's Republic of China

Evaluation meeting between the Evaluation Team of Japan International Cooperation Agency (JICA) and the Patent Office of the People's Republic of China on the technical cooperation for the Education System Development Project for Chinese Patent Information Retrieval which is to terminate on October 31, 1990.

Date: July 16, 1990

Place: The Patent Office of the People's Republic of China.

Attendance:

JAPANESE SIDE

(1) Japanese Evaluation Survey Team

Leader: Yukitoshi Nagasawa

-Director, Technical Cooperation  
Division,  
Mining and Industrial development  
Cooperation Department, JICA

Member: Isao Yamanishi

-Director, Electronic Data  
Processing Administration Division,  
General Administration Department,  
Japanese Patent Office

Kenzo Nakamura

-Assistant Manager, 6th System  
Department, Computer System,  
HITAC Division,  
FACOM HITAC Limited

Hiroko Hadate

-Staff, Technical Cooperation  
Division, Mining and Industrial  
Development Cooperation Department,  
JICA

(2) Japanese Expert

Toshio Tamura

-Chief Advisor

Katsuhiko Matsuzaki

-System Management and System  
Analysis

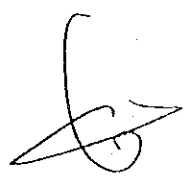
Hiroshi Kizaki

-System Engineering and Programming

CHINESE SIDE

Chinese Evaluation Survey Team

- Leader: Shen Yaozeng - Deputy Director of the Patent office, P.R.C
- Member: Yang Cailiang - Director of Automation Department, the Patent  
office of P.R.C
- Wang Yuhua - Deputy Director of Automation Department, the  
Patent office of P.R.C
- Dong Xuekui - Deputy Director, 2nd Div. International Coo-  
peration Department, the Patent office of P.R.C
- Lin binghui - Director of Division 3, Automation Department,  
the Patent office of P.R.C
- Zhang Chengqing - Senior Engineer of Division 1, Automation  
Department, the Patent office of P.R.C



## I. INTRODUCTION

### 1. OBJECTIVE

The Japanese Evaluation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Mr. Yukitoshi Nagasawa visited the People's Republic of China from July 10 to 17, 1990 for the purpose of evaluating the achievements and assessing the future prospects of the technical cooperation project on the Education System Development for Chinese Patent Information Retrieval (hereinafter referred to as "the Project") on the basis of the Record of Discussions (hereinafter referred to as "the R/D") signed on August 8, 1986 between the Japanese Implementation Survey Team and the Chinese Patent office. The Team discussed and studied with the Chinese counterparts concerned and the Japanese experts a number of aspects regarding the implementation of commitments, activities of the Project and constraints which may have hampered the progress of the activities.

Through careful studies and discussions, both parties summarized their findings and observations as described in the following chapters.

### 2. BRIEF BACKGROUND OF THE PROJECT

In 1984, the Government of the People's Republic of China requested the Government of Japan to extend the project type technical cooperation for developing Education System for Chinese Patent Information Retrieval System which may eventually contribute to the improvement of the management of the Patent Information in the People's Republic of China.

Upon this request, the Government of Japan through JICA, sent the several survey teams to the People's Republic of China for the purpose of identifying the necessity and effectiveness of the said technical cooperation.

On the basis of the reports and recommendations of these teams, the Japanese Implementation Survey Team organized by JICA visited the People's Republic of China from August 4 to 10, 1986 for the purpose of working out the details of the technical cooperation program on "The Education System Development Project for Chinese Patent Information Retrieval" with the

Authorities concerned of the Chinese Government.

Thus, The R/D of the Project was signed on August 8, 1986 between the leader of the Japanese Implementation Team and the leader of the Implementation Survey Team of the Patent Office, the People's Republic of China, thereby the four year technical cooperation started.

### 3. SUMMARY OF THE PROJECT

The summarized records of major events and activities in the course of implementation of the technical cooperation program are described as below.

#### Chronological Review of the Project:

<u>Year</u>	<u>Month</u>	<u>Item</u>
1985	Nov.	Dispatch of the Japanese Pre-Implementation Survey Team
1986	Aug.	Dispatch of the Japanese Implementation Survey Team
	Aug.	Signing of R/D and Tentative Schedule of Implementation
	Nov.	Start of the Project
	Dec.	Training of the Chinese counterpart personnel in Japan (7 persons)
1987	May	Dispatch of a long-term expert (Chief Advisor)
	July	Completion of the residence for the Japanese experts at the Project site
	Aug.	Dispatch of two long-term experts (System Management And Analysis, System Engineering and Programming)
	Aug.	Training of the Chinese counterpart personnel in Japan (7 persons)
	Sep.	Dispatch of the Consultation Survey Team
1988	Apr.	Completion of "The Basic Conceptual Design of Chinese Patent Information Retrieval Systems" by the Chinese Patent Office
	Apr.	Arrival of the equipment (CPU, etc.) provided by JICA at the site
	June	Training of the Chinese counterpart personnel in Japan (6 persons)

<u>Year</u>	<u>Month</u>	<u>Item</u>
1988	July	Dispatch of the short-term Japanese experts on system development (hereinafter referred to Annex 3 as the short-term Japanese experts)
	Oct.	Dispatch of the Consultation Survey Team
1989	Mar.	Completion of the new building for installation of the equipment
	Apr.	Completion of "The Basic Design of Chinese Patent Information Retrieval Systems" by the Chinese Patent Office
	June	Services of the Japanese experts suspended due to the incident in Beijing
	Oct.	
	Dec.	Installation of the equipment provided by JICA at the site
1990	Jan.	Dispatch of the Consultation Survey Team
	Apr.	Development of "Pilot System of Patent Information Retrieval"
	July	Dispatch of the Evaluation Survey Team

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(Plan)

1990	Sep.	Arrival of the final equipment (3 terminals) provided by JICA
	Oct.	Return of the long-term Japanese experts (3 persons)



## II. METHODOLOGY OF EVALUATION

### 1. Materials used for reference

In order to evaluate the past performance and achievements quantitatively as well as qualitatively, the following materials are adopted as references:

- (1) The Record of Discussions
- (2) The official request made by the Government of the People's Republic of China with respect to the services of Japanese experts, the training of Chinese counterparts in Japan and the donation of equipment by means of Colombo Plan Forms A-1, A-2/3, and A-4 respectively.
- (3) The Minutes of Meetings and the annual work plans agreed or accepted in course of implementation of the Project.
- (4) The status report on the progress of the Project by the Chinese Patent office.

2. To facilitate a correct and objective evaluation, the Team discussed the various aspects of the Project with the Japanese experts and the Chinese counterparts and also observed closely the facilities, machinery and equipment, and developed documents such as system designs, program designs and the list of programs.

## III. RESULT OF EVALUATION

### 1. BUILDING AND FACILITIES

(plans and performance)

The computer room with the width of about 200m<sup>2</sup> was prepared and made available in the new building of the Chinese Patent Office for the Project in March, 1989.

(Comment)

Due to the delay of the allocation of a suitable computer room to the Project and the suspension of the services of the Japanese experts, the installation of the C.P.U. (Central Processing Unit) and its attachment could not be done until December, 1989, resulting in the delay of six months.

## 2. STAFFING

(plan and performance)

The organization charts of Chinese Patent Office and the Project are shown in Annex 1.1 and the schedule of Chinese staff allocation in Annex 1.2.

At present there are 26 counterparts for the Project, which shows the lack of 1 person as against the commitment of 27 in "the Schedule of Chinese Staff Allocation" of the Record of Discussions.

## 3. MANAGEMENT AND ADMINISTRATION

All administrative and managerial services have been carried out by the staff of the Chinese Patent Office.

The effects of the Chinese Patent Office on the fulfilment of managerial matters for the Project activities, including the preparation of the computer room are highly appreciated.

## 4. EQUIPMENT

(1) Up to the present, the equipment worth about 220 million yen, including shipping cost has been provided to the Project by the Japanese Government through JICA.

The major items donated to the Project are as follows:

- Apr. 1988 C.P.U. and others
- Nov. 1988 Maintenance parts and consumable goods
- May 1989 Consumable goods
- Sep. 1990 3 additional terminals are due to arrive.

(2) At the time of signing the Record of Discussions, the computer system was to be installed in the No.4 building of the Chinese Patent Office.

In September, 1987, however, both Japanese Consultation Team and the Chinese Patent Office agreed that the computer system would be installed in the computer room of the new patent office building which was expected to be completed by August 1988.

The construction of the said building was not completed as expected, and an unforeseeable incident in Beijing happened in June, 1989. Consequently the installation work of the computer system could not be started until November, 1989.

(3) In October 1988, at the time of mutual consultation on the progress of the Project, the Chinese side strongly requested that the number of terminals should be increased to meet the number of programming staff.

In January 1990, JICA decided to provide three terminals to the Project after confirming the report submitted by the Consultation Team sent to Beijing early in 1990.

## 5. JAPANESE EXPERTS

JICA has dispatched three (3) long-term experts and twenty (20) short-term experts during the period from November, 1986 to July, 1990.

In addition, four (4) JICA teams visited the People's Republic of China for the purpose of the survey and consultation with the Chinese authorities concerned on the smooth implementation of the Project. The Japanese experts and the missions dispatched by JICA are shown in Annex 3.

## 6. TRAINING IN JAPAN

From 1986 to 1989, twenty (20) personnel were trained in JAPAN. The names of the trainees and their training subjects, etc. are shown in Annex 4.

## 7. BUDGET

- (1) The Chinese side has contributed to the successful implementation of the Project by effecting the budget outlays earmarked for the Project as shown in Annex 5.1.
- (2) The summary of the outlays by the Japanese side for the provision of equipment, dispatch of experts and training of counterpart personnel in JAPAN are shown in Annex 5.2.

## 8. WORK PLAN AND ACCOMPLISHMENT

- (1) The Project accomplishment based on the Tentative Schedule of Implementation is shown in Annex 6 with the scheduled plans indicated by white lines and the actual accomplishment shown by black lines.
- (2) The transfer of technology from the Japanese experts to the Chinese counterparts has been carried out in five divided fields, which were agreed and shown in the Master Plan annexed to the Record of Discussions.

The details on technology transfer are explained hereunder:

- (i) Fundamental training on patent information, patent information retrieval and computer

- (i)-1 Fundamental training on patent information and patent information retrieval

This training was given to the counterparts by the experts before the installation of the computer system.

An integrated training on patent information and patent information retrieval in general was also given in Japan to all the counterparts who were sent to Japan, and hence there is scarcely no need to train them on this matter.

(i)-2 Computer

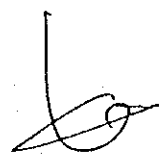
Technology transfer to the counterparts was completed.

(ii) Developing training materials of patent information retrieval

The counterparts have acquired ability to produce the said training materials.

Up to now, the manuals, standards, etc. pertaining to the system design, machine operation, etc. have been prepared by the counterparts with the advice of the Japanese experts.

However, if any necessity arises the experts will continue their guidance on this matter on condition that at least two counterparts are assigned per expert for this purpose.



1.5

(iii) System design and programing for patent information retrieval

(iii)-1 System design for patent information retrieval

Guidance by the Japanese experts started with the preparation of the standard and work-sheet of system development.

The counterparts worked on ①the analysis of the requirements needed for the Chinese Patent Information Retrieval, ②system planning, ③basic system design and ④detailed system design with advise and guidance of the Japanese experts.

Both system design and program design should have been completed by June 1989, but due to their enormous scale, they were completed in July, 1990 with the delay of one year.

The idea of Chinese counterpart is that the Education System, which is the by-product of technical cooperation, might serve a part of the actual patent information retrieval in the Chinese Patent Office.

The Japanese experts and the consultation teams as well advised the counterparts to minimize the scale by telling them that a smaller system could serve effectively for the educational purposes.

The Chinese counterparts, however, have not been inclined to curtail the scale.

The Japanese side is in the belief that the Chinese counterparts have already gained enough knowledge and technique needed for the designing of a system for patent informaton retrieval.

(iii)-2 Programming for patent information retrieval

Technology transfer for programming will not be completed by the end of cooperation period, because it was unable to start a machine-based practice until January, 1990 when the computer system became available for use.

Before the installation of the computer system, the experts trained the counterparts in coding and debugging on the paper.

(iii)-3 Pilot system of patent information retrieval

In order to have a bird's-eye view of a patent information retrieval system, the Chinese counterparts developed a small scale model system (a pilot system) with the guidance of the Japanese experts from February to April, 1990.

Through this OJT (on the job training), the counterparts have mastered the fundamental technique of system design, programming, and testing for patent information retrieval.

(iv) Operation and management of computer

The counterparts have acquired knowledge and experience and there will be no further need of training by the experts after the end of October, 1990.

(v) Management and application of patent information retrieval

The counterparts have acquired the necessary knowledge and techniques for the said management through the preparation work of the manuals, standards, regulations, etc. for patent information retrieval. ( c.f. (ii) Developing training materials of patent information retrieval )

In addition to the above the counterparts will get guidance on the maintenance and management of the developed programs and documents from July to October, 1990.

#### IV. CONCLUSION

1. In general, most activities programmed in the Record of Discussions are reaching their final targets.

This is largely due to the efforts of the Chinese counterparts with the cooperation of the Japanese experts, the Chinese Patent Office and the other related organizations of both Japan and the People's Republic of China.

However, some activities are behind schedule.

This is mainly attributable to the delay in the installation of the computer system in the new Chinese Patent Office Building, suspension of the service of the Japanese experts resulting from the incident in Beijing and to the enormous scale of the projected system for patent information retrieval.

2. Technology transfer is behind schedule in the following fields:

- (1) System design and programming for patent information retrieval

- Program design, programming and testing are delayed for approximately six months behind schedule.

- (2) Management and application of patent information retrieval

- Training of the counterparts in the application of patent information retrieval has not been conducted at the time of this evaluation, because the programming of the said system is still in the process.



3. The objective of the Project is to develop human resources in the field of management of patent information retrieval in the People's Republic of China, and for this purpose the present cooperation activities are directed toward developing an education system for the Chinese Patent Information Retrieval System on the OJT ( on the job training ) method.

This means that the Chinese counterparts will master the whole process of the development of the System, including planning, designing, programming and testing while engaged in the said OJT activities with the guidance of the Japanese experts.

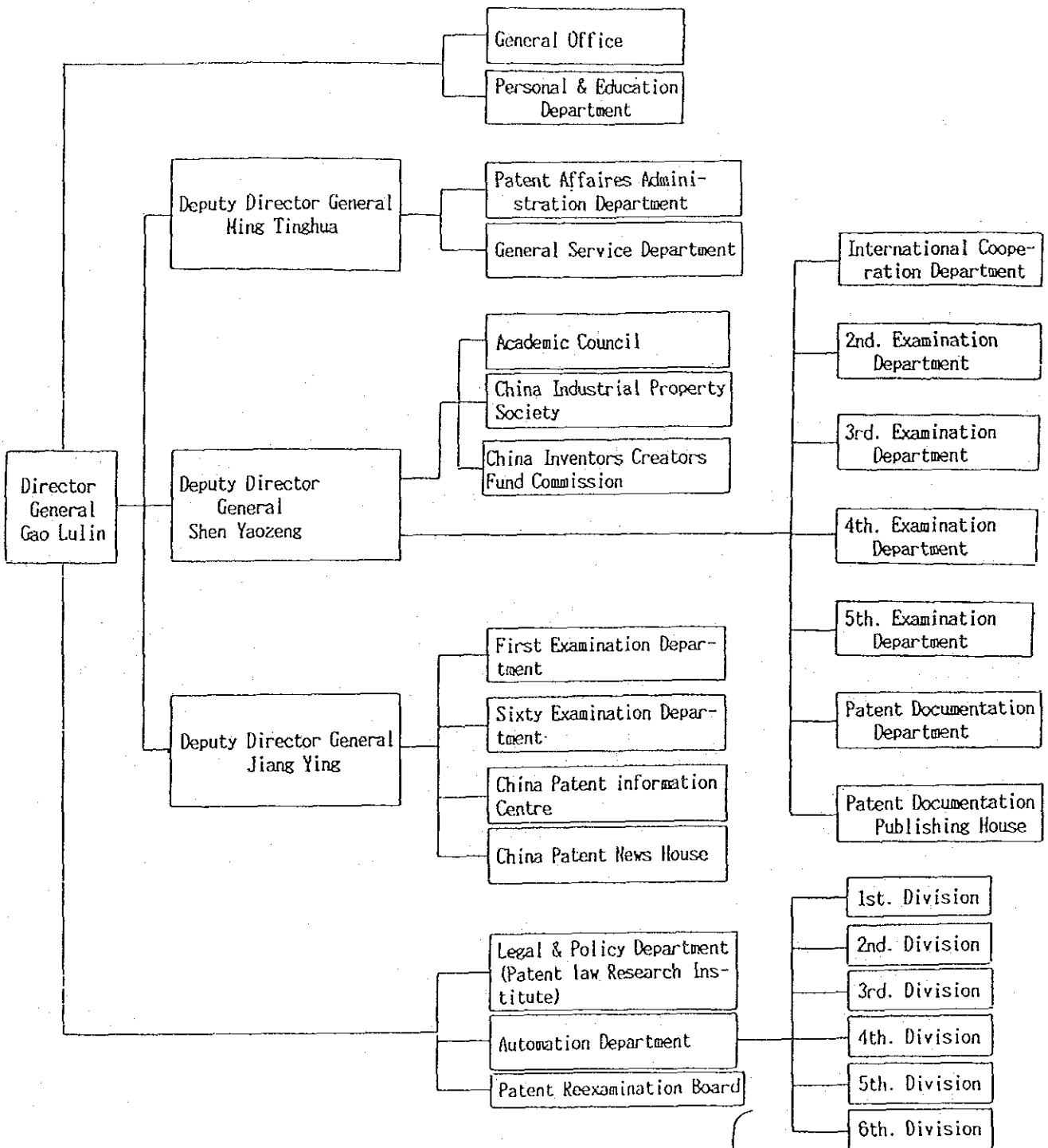
The present stage of technology transfer from the experts to the counterparts is approaching the final target of cooperation.

The counterparts will be judged to have acquired enough ability to sustain the Project when they have learned the techniques of designing, programming and testing of a patent information retrieval system for practice.

Both parties are cognizant that the Chinese counterparts will have acquired the above ability in six months after the termination of the cooperation period stipulated in the present Record of Discussions.

4. In accordance with the above observations, it is deemed necessary that the present cooperation period be extended for six months after the expiry date of the present period of cooperation.

THE ORGANIZATION CHART OF THE CHINESE PATENT OFFICE

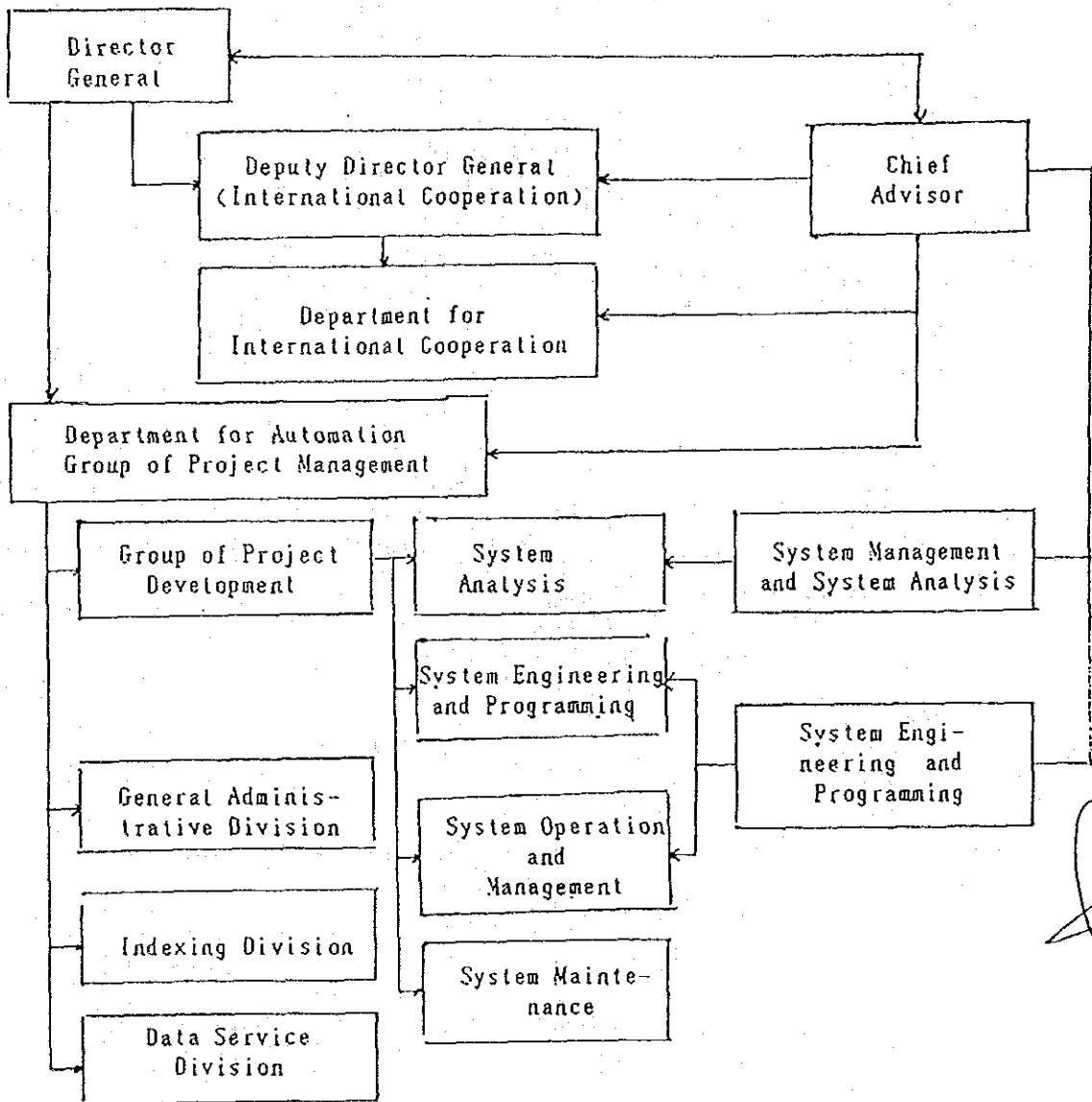


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THE ORGANIZATION CHART OF THE PROJECT

(THE CHINESE PATENT OFFICE)

(JAPANESE EXPERTS)



## Annex 1.2

## Schedule of Chinese Staff Allocation

		Fiscal Year				
		1986	1987	1988	1989	1990
Staff						
Counterparts	System Management	2(3)	2(3)	2(3)	2(3)	2(3)
	System Analysis	3(4)	3(4)	3(3)	3(2)	3(2)
	System Engineering	2(3)	9(9)	9(10)	9(10)	9(11)
	Programming	-( )	6( )	13(5)	13(7)	13(10)
Administrative Personnel		-( )	10(15)	10(15)	10(15)	10(15)
Total		7(10)	30(31)	37(31)	37(37)	37(41)

Note 1 : Fiscal Year as shown above starts in April and ends in March.

Note 2 : Figures in brackets show the number of the counterparts actually assigned.


  
 (15)

Chinese Staff Allocation

(fiscal year)

	1986	1987	1988	1989	1990
1. System Management	Yang Cailiang Wang Yuhua Dong Xuekui	<-- <-- <--	<-- <-- <--	<-- <-- <--	<-- <-- <--
2. System Analysis	Zhang Chengqing Lin Binghui Wang Yingxin Liu Yanhua	<-- <-- <-- <--	<-- <-- <--	<-- <--	<-- <--
3. System Engineering	Li Changyi Yang Yifeng Zhao Tongxuan	<-- <-- <-- Cao Liming Ding Jie Wang Xiao Wang Wei Ji Xiaoling Yang Xiuzhi	<-- <-- <-- <-- <-- <-- <-- <-- <-- <-- Li Hai	<-- <-- <-- <-- <-- <-- <-- <-- <-- <-- <--	<-- <-- <-- <-- <-- <-- <-- <-- <-- <-- <-- Zhang Chengqing
4. Programming			Zhang Yu Su Lixin Xu Kaj Li Hua Han Jiao	<-- <-- <-- <-- <-- Wang Yuan Chen Lin	<-- <-- <-- <-- <-- <-- <-- Chen Bing Ye Dawei Cui Wei

C.A.

Annex 2.

RESULT OF EQUIPMENT PROVIDED BY JICA

1. Hardware

No	Name of Equipment	Numbers
1	Central Processing Unit	1
2	Floppy Disk Input Output Equipment	1
3	Line Printer	1
4	Kanji Line Printer	1
5	Magnetic Tape Controller	1
6	Magnetic Tape Unit	2
7	Magnetic Disk Controller	1
8	Magnetic Disk Unit	2
9	Terminal Control Equipment	1
10	Terminal Unit	3
11	Kanji Input Unit	3
12	Data Entry Station	2
13	Constant Voltage Constant Frequency Power Supply	1

2. Software

No	Name	Numbers	No	Name	Numbers	No	Item	Numbers
1	VOSI/ES	1	9	EASY2	1	17	COBOL/SYN	1
2	VICLOAD	1	10	XSORT	1	18	OFORT77	1
3	ES/AF	1	11	KAPS	1	19	FORTTRAN/SYN	1
4	ES/IPPF E2	1	12	XNAP	1	20	OPLI E2	1
5	ES/VSAM	1	13	XNAPD/IF	1	21	PLI/SYN	1
6	ES/SPOOL	1	14	AOM	1	22	FOG	1
7	BTAM	1	15	DSR	1	23	FCOPY2	1
8	LINE	1	16	XCOBOL E2	1	24	HDRS	1

## LIST OF JAPANESE EXPERTS AND MISSIONS

## A. EXPERTS

	N A M E	F I E L D	P E R I O D
	(Long-term)		
1	Mr. Yukichi Karasawa	Chief Advisor	87.05.20. - 89.05.19.
2	Mr. Hiroshi Kizaki	System Engineering and Programming	87. 8. 3. - 89. 7.20.
3	Mr. Katsuhiko Matsuzaki	System Management and System Analysis	87. 8. 3. - 89. 7.20.
4	Mr. Toshio Tamura	Chief Advisor	89. 5. 9. - 89. 7.20.
5	Mr. Toshio Tamura	Chief Advisor	89.10.25. - 90.10.31.
	(Short-term)		
1	Mr. Nagao Satokawa	System Planning	88. 7.15 - 88. 8.14.
2	Mr. Ryuichi Yoshida	System Design	89. 2.27. - 89. 3.11.
3	Mr. Nagao Satokawa	System Design	89. 2.27. - 89. 3.11.
4	Mr. Toshiyuki Arai	C.V.C.F. Power Supply	89. 2.27. - 89. 3. 4.
5	Mr. Yoshimi Tetsu	C.V.C.F. Power Supply	89. 5.25. - 89. 6. 8.
6	Mr. Ryuichi Yoshida	System Design	89. 5.29. - 89. 6. 7.
7	Mr. Nagao Satokawa	System Design	89. 5.29. - 89. 6. 8.
8	Mr. Katsuhiko Matsuzaki	System Management and System Analysis	89.10.31. - 90. 2. 2.

	N A M E	F I E L D	P E R I O D
9	Mr.Hiroshi Kizaki	System Engineering and Programming	89.11.14.- 89.12.27.
10	Mr.Yoshimi Tetsu	C.V.C.F.Power Supply	89.11. 7.- 89.11.24.
11	Mr.Nagao Satokawa	System Design	89.11. 7.- 89.11.14.
12	Mr.Yoshiaki Kitamura	Installation	89.11.14.- 89.12.13.
13	Mr.Toshio Baba	Installation and Maintenance	89.11.14.- 90. 1.12.
14	Mr.Ryuichi Yoshida	System Design	89.12. 4.- 89.12. 9.
15	Mr.Takeo Tokumoto	Basic Software	89.12. 6.- 89.12.23.
16	Mr.Hiroshi Kizaki	System Engineering and Peogramming	90. 1.25.- 90. 5.22.
17	Mr.Katsuhiko Matsuzaki	System Management and Analysis	90. 2.27.- 90. 7.24.
18	Mr.Hiroyuki Momosawa	Program Design	90. 4.17.- 90. 4.29.
19	Mr.Hiroshi Kizaki	System Engineering and Programming	90. 6.19.- 90.10.31.
20	Mr.Shozo Ishiguro	Program Design	90. 6.19.- 90. 6.27.



B. MISSIONS

MISSION NAME AND MEMBER	DURATION AND FIELD
<p>1. Pre-Implementation Survey Team</p> <p>Mr. Toshio Yamanaka</p> <p>Mr. Makoto Yamaga</p> <p>Mr. Seiichi Endo</p> <p>Mr. Katsuo Ooki</p>	<p>1985.11.25. - 1985.12. 1.</p> <p>Leader</p>
<p>2. Implementation Survey Team</p> <p>Mr. Masaru Umeda</p> <p>Mr. Toranosuke Hashimoto</p> <p>Mr. Seiichi Endo</p> <p>Mr. Toshio Okazaki</p>	<p>1986. 8. 4. - 1986. 8.10.</p> <p>Leader</p>
<p>3. Consultation Survey Team</p> <p>Mr. Katsuji Ito</p> <p>Mr. Toshio Okazaki</p> <p>Mr. Kenzo Nakamura</p> <p>Mr. Makoto Yamashita</p>	<p>1987. 9. 5. - 1987. 9.10.</p> <p>Leader</p> <p>Technical Cooperation Planning</p> <p>Computer</p> <p>Coordinator</p>
<p>4. Consultation Survey Team</p> <p>Mr. Yukitoshi Nagasawa</p> <p>Mr. Akira Yamazaki</p> <p>Mr. Kenzo Nakamura</p> <p>Mr. Yoshiharu Yoneyama</p>	<p>1988.10.25. - 1988.10.30.</p> <p>Leader</p> <p>Patent System</p> <p>Computer</p> <p>Coordinator</p>

1.5

MISSION NAME AND MEMBER	DURATION AND FIELD
5. Consultation Survey Team Mr. Naoyuki Tamai Mr. Kenzo Nakamura Mr. Yoshiharu Yoneyama	1990. 1. 8. - 1990. 1. 13. Leader System Development Coordinator




## Annex 4.

## LIST OF CHINESE COUNTERPARTS TRAINED IN JAPAN

	N A M E	F I E L D	P E R I O D
1	Ms. Wang Yu-hua	Information Processing	86.12. 3. - 87. 7.30.
2	Mr. Dong Xue-kui	"	"
3	Ms. Yin Gen-di	"	"
4	Mr. Wu Nian-Zhong	"	"
5	Mr. Li Cheng-Yi	"	"
6	Mr. Wang Xiao	"	"
7	Mr. Zhang Yu	"	"
8	Mr. Jiang Yue-kun	Hardware Maintenance	87. 8.11. - 88. 4.24.
9	Ms. Yang Xiu-xhi	"	"
10	Mr. Li Hai	"	"
11	Mr. Zhao Tong-xuan	Information Processing	"
12	Mr. Fu Guan-li	"	"
13	Mr. Zhang San-qi	"	"
14	Ms. Cao Li-ming	"	"
15	Mr. Yang Yi-feng	Information Processing	88. 6.26. - 89. 3.26
16	Ms. Ji Xiao-ling	"	"
17	Ms. Wang Wei	"	"
18	Ms. Su Li-xing	"	"
19	Ms. Wu Ling-hua	"	"
20	Ms. Li Hong	"	"

Annex 5.1

EXPENDITURE FOR THE PROJECT BY THE CHINESE PATENT OFFICE ( UNIT : THOUSAND CHINESE YEN )

YEAR	CONSTRUCTION	MANAGEMENT	EQUIPMENT	PERSONNEL	SERVICES	TOTAL
1986		33		52	25	110
1987		34	125	52	95	306
1988		54	200	79	495	828
1989	* 55,700	71	233	79	500	56,583
1990		117	48	79	197	441
TOTAL	55,700	309	606	341	1,312	58,268

\* This amount is the total cost for the construction of the new patent office building.

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## EXPENDITURE FOR THE PROJECT BY JICA

(UNIT: THOUSAND YEN)

ITEM YEAR	DISPATCH OF SURVEY TEAM	DISPATCH OF EXPERT	PROVISION OF EQUIPMENT	T R A I N I N G IN JAPAN	T O T A L
1 9 8 5	1,562	-	-	-	1,562
1 9 8 6	1,768	-	-	2,097	3,865
1 9 8 7	1,310	19,624	196,494	12,076	229,504
1 9 8 8	1,111	28,242	13,799	18,302	61,454
1 9 8 9	1,236	24,737	1,232	-	27,205
1 9 9 0	1,780	2,706	5,499	-	9,985
T O T A L	8,767	75,309	217,024	32,475	333,575

NOTE : 1) The expenditure for the dispatch of expert include the value of the equipment carried by Japan experts.

2) Year is Japanese fiscal year from April 1 to March 31 of the following year.

Annex 6.

1. ANNUAL WORK PLAN

Fields	Fiscal Year				
	1986	1987	1988	1989	1990
1. Fundamental training on Patent Information and Patent Information Retrieval and Computer.					
2. Development of training Materials for Patent Information Retrieval.					
3. System design and Programming for Patent information Retrieval.					
4. Operation and management of Computer.					
5. Management and application of Patent Information Retrieval.					

Note : ——— Plan in Tentative Schedule of Implementation

————— Actual Implementation

Fiscal Year starts in April and ends in March in the charts.

*CS*

2. TECHNICAL COOPERATION PROGRAM

Item	Fiscal Year				
	1986	1987	1988	1989	1990
Term of Cooperation	_____				
Building Construction of the Patent Office	_____				
<u>Japanese side</u>					
I. Dispatch of Japanese Experts					
1. Long-term Experts					
(1) Chief Advisor	_____				
(2) Expert in the field of Management and System Analysis	_____				
(3) Expert in the field of System Engineering and Programming	_____				
2. Short-term Experts	( Short-term Experts may be dispatched when necessity arises.)				

Item	Fiscal Year				
	1986	1987	1988	1989	1990
3. System Engineering					
4. Programming					
5. Others ( Administrative Personnel )					
II. Accomodations for the Japanese Experts					

Notes : ——— Plan in Tentative Schedule of Implementation

————— Actual Implementation

Fiscal Year starts in April and ends in March in the charts.



ACCOMPLISHMENT AND ANNUAL WORK PLAN (1/2)

		YEAR / FISCAL YEAR			
		1980	1981	1982	1983
NO	ITEM	1980	1981	1982	(4, 5, 11-13)
1	1. Training of Patent Information and Patent Information Retrieval 2. Training of Software (1) 3. Training of Hardware Maintenance (3) Total: 7	1. Training of Patent Information and Patent Information Retrieval 2. Training of Software (1) 3. Training of Hardware Maintenance (3) Total: 7	1. Training of Patent Information and Patent Information Retrieval 2. Training of Software (4) 3. Training of Hardware Maintenance (3) Total: 7	1. Training of Patent Information and Patent Information Retrieval 2. Training of Software (4) 3. Training of Hardware Maintenance (3) Total: 7	1. Training of Patent Information and Patent Information Retrieval 2. Training of Software (8)
2	Developing training materials of Patent Information Retrieval Education for the members in the field of System Development	1. Introduction of the examples of Patent Information Retrieval 2. Guidance for making the Data-Base of the Patent Information 3. Guidance for making the plan of education for the members 4. Guidance for making the teaching materials for basic education 5. Guidance for basic education (Computer Programming etc.)	1. Introduction of the examples of Patent Information Retrieval 2. Guidance for making the Data-Base of the Patent Information 3. Guidance for making the plan of education for the members 4. Guidance for making the teaching materials for basic education 5. Guidance for basic education (Computer Programming etc.)	1. Guidance for basic education (Computer Programming, JCL etc.) 2. Guidance for basic education (Computer Programming, JCL etc.) 3. Guidance for basic education (Development of the Pilot System etc.)	1. Guidance for basic education (Computer Programming, JCL etc.) 2. Computer Machine Training (Development of the Pilot System etc.)
3	System design and Programming for Patent Information Retrieval	1. Guidance for making out standard of system development and work-sheet of system development a. Analysis b. System Planning 2. Guidance for System Development a. Analysis b. Long Range Planning 3. Guidance for making out project management standard	1. Guidance for making out standard of system development and work-sheet of system development a. Analysis b. System Planning 2. Guidance for System Development a. Analysis b. Long Range Planning 3. Guidance for making out project management standard	1. Guidance for making out standard of system development and work-sheet of system development a. System Planning b. System Design 2. Guidance for System Development a. System Planning b. System Design	1. Guidance for making out standard of system development and work-sheet of system development a. System Design b. Program Design 2. Guidance for System Development a. System Design b. Program Design
4	Operation and management of Computer	1. Guidance for the system installation (Power Supply/Air Conditioner/Layout etc.) 2. Guidance for management of the construction of new computer room	1. Guidance for the system installation (Power Supply/Air Conditioner/Layout etc.) 2. Guidance for management of the construction of new computer room	1. Guidance for the system installation (Transportation, Inspection and temporary custody of the computer) 2. Guidance for management of the construction of new computer room 3. Confirmation of Facilities	1. Guidance for installation of CYCF Computer. 2. Guidance for installation of Computer. 3. Guidance of the computer maintenance and machine operation 4. Guidance of the system generation and machine operation 5. Guidance for making out standard of Computer Center
5	Management and application of Patent Information Retrieval	1. Guidance for storing data and making out data-management standard	1. Guidance for storing data and making out data-management standard	1. Guidance for storing data and making out data-management standard	1. Guidance for storing data and making out data-management standard

note: Fiscal year starts in April and ends in March in the chart.

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ACCOMPLISHMENT AND ANNUAL WORK PLAN (2/2)

NO	ITEM	1980 (4-7)	1980 (7-10)	< FOLLOW UP > 1980.11-1981.4
1	Fundamental training on Patent Information, Patent Information Retrieval and Computer			
2	Developing training materials of Patent Information Retrieval	Education for the members in the field of System Development	1. Training on a. Chinese character processing b. ZMAP c. IEX	
3	System design and programming (for Patent Information Retrieval)	1. Guidance for professional education (Programming Design etc.) 2. Computer Machine Training (Development of the Pilot System etc.)	1. Guidance for System Development a. Programming (master file, inverted file, retrieval, output on screen & print) 2. Guidance of making out coding management standard	1. Guidance for System Development a. programming (master file, inverted file, retrieval, output on screen & print) b. test c. evaluation 2. Guidance of making out test management standard
4	Operation and management of Computer	1. Guidance for making out standard of machine operation 2. Guidance for system generation and machine operation 3. Guidance for management of system operation	1. Guidance for making out standard of machine operation 2. Guidance for system generation and machine operation 3. Guidance for system tuning	
5	Management and application of Patent Information Retrieval		1. Guidance for system management a. maintenance and management of program b. maintenance and management of documents	Brief introduction of document analysis

CS

表一 1 3 中国特許情報検索システムの年次活動計画

(1990年 7月終了時評価調査確認)

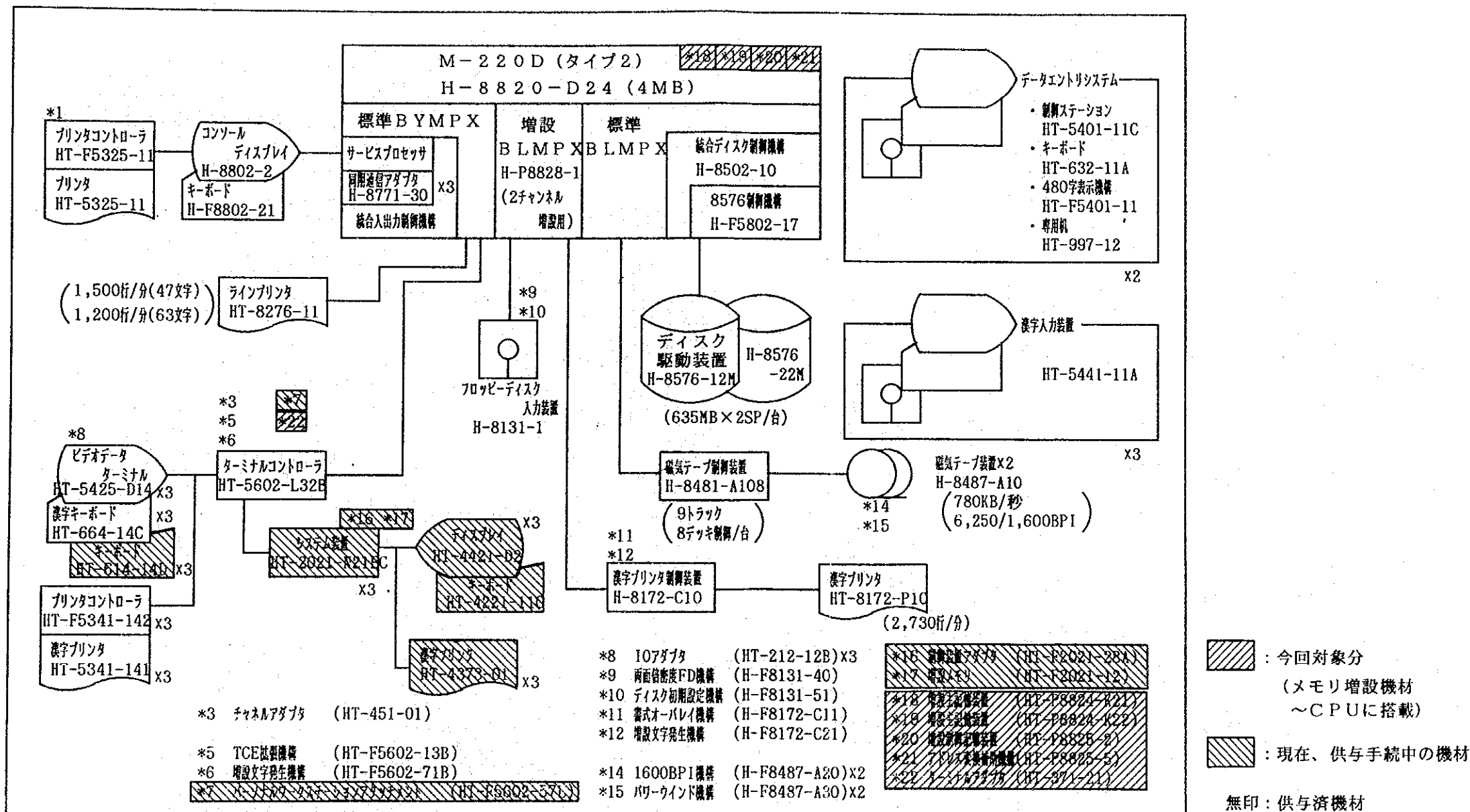
項番	項目	1986年 (11~3)	1987年 (4~3)	1988年 (4~3)	1989年 (4~5, 11~3)	1990年 (4~7)	1990年 (7~10)	FOLLOW UP 1990.11~1991.4
1	特許情報及び特許情報検索及びコンピュータに係る基礎訓練 (中国研修生受入れ)	(1) 特許情報, 特許情報検索研修 (2) ソフトウェア研修 (7名)	(1) 特許情報, 特許情報検索研修 (2) ソフトウェア研修 (4名) (3) ハードウェア保守研修 (3名) (計7名)	(1) 特許情報, 特許情報検索研修 (2) ソフトウェア研修 (6名)				
2	特許情報検索に係る教材の開発		(1) 特許情報検索事例紹介 (2) 特許情報データベース作成指導					
	システム開発委員育成		(1) 要員育成計画作成指導 (2) 基礎教育用教材作成指導 (3) 基礎教育指導 (コンピュータプログラミング等)	(1) 基礎教育指導 (コンピュータプログラミング, JCL等)	(1) 基礎教育指導 (コンピュータプログラミング, JCL等) (2) コンピュータマシン訓練(実機) (Pilot System開発等)	(1) 専門教育指導 (プログラム設計等) (2) コンピュータマシン訓練(実機) (Pilot System開発等)	(1) 下記項目の指導 a・中国漢字処理 b・XMAP c・IEX	
2	特許情報検索用システム設計及びプログラム作成		(1) システム開発標準手順及びワークシートの作成指導 a・分析 b・システム計画 (2) システム開発指導 a・分析 b・長期計画 (3) プロジェクト管理基準設定指導	(1) システム開発標準手順及びワークシートの作成指導 a・システム計画 b・システム設計 (2) システム開発指導 a・システム計画 b・システム設計	(1) システム開発標準手順及びワークシートの作成指導 a・システム設計 b・プログラム設計 (2) システム開発指導 a・システム設計 b・プログラム設計	(1) システム開発指導 a・プログラム設計 (2) コーディング基準設定指導	(1) システム開発指導 a・プログラミング (マスターファイル, イポートファイル, 検索, 端末画面とプリンタへの出力) (2) コーディング基準設定指導	(1) システム開発指導 a・プログラミング (マスターファイル, イポートファイル, 検索, 端末画面とプリンタへの出力) b・テスト c・評価 (2) テスト基準設定指導
4	コンピュータの運営, 管理		(1) 設備計画指導 (電源, 空調, V/A等) (2) 新コンピュータ室建設の管理指導 (3) 機材の確認	(1) 設備計画指導 (輸送, 検査, 仮保管) (2) 新コンピュータ室建設の管理指導 (3) 機材の確認	(1) CVCF設置指導 (2) コンピュータ設置指導 (3) コンピュータ保守指導 (4) システム生成とマシン操作指導 (5) センタ運用基準設定指導	(1) マシンオペレーション基準設定指導 (2) システム生成とマシンオペレーション指導 (3) システム操作指導	(1) マシンオペレーション基準設定指導 (2) システム生成とマシンオペレーション指導 (3) システムチューニング指導	
5	特許情報検索の管理及び活用		(1) データの作成及び管理基準作成指導	(1) データの作成及び管理基準作成指導			(1) システム管理指導 a・プログラム保守管理 b・ドキュメント保守管理	(1) 文献解析紹介



附 属 资 料

中国特許情報検索用教育システム開発事業

1-1. 日本側の供与機材 (構成図) : 平成 2年 8月 7日現在



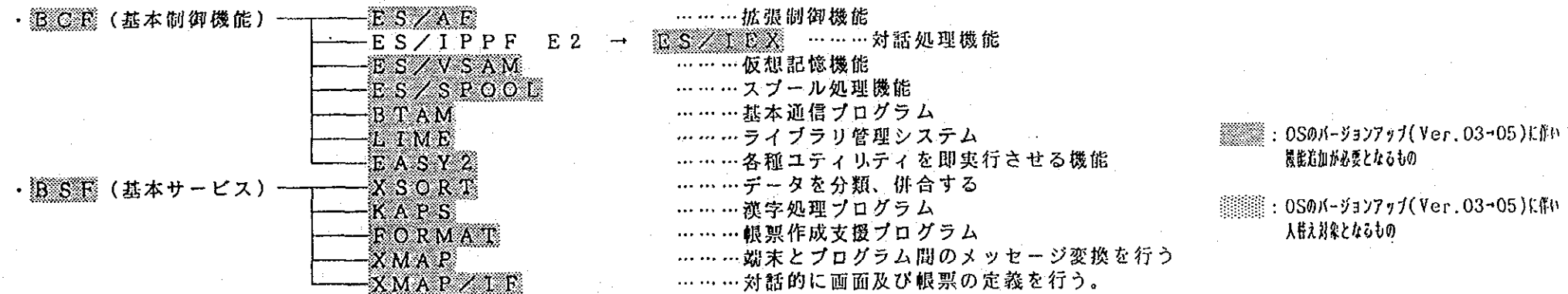
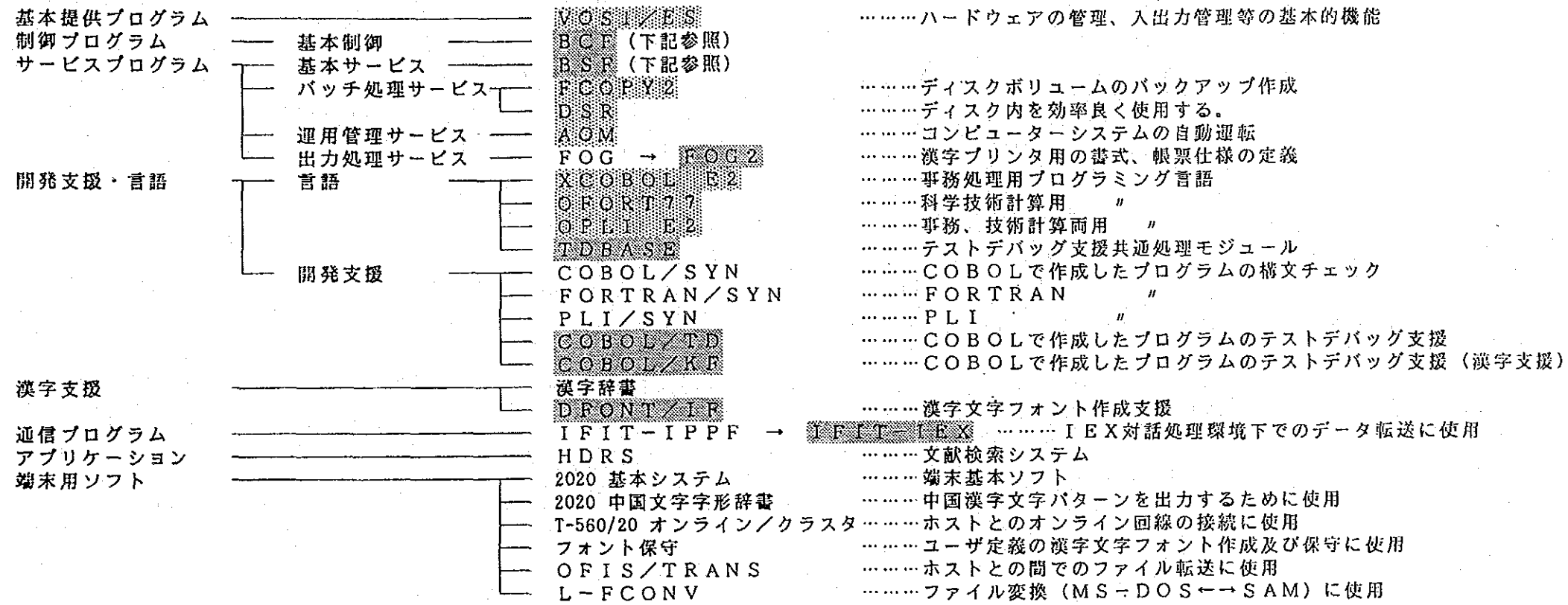
(出所) 機材実施計画書 (平成 2年 8月 7日起案日) の別添 1.

供与機材名 : M-220Dシステム 増設機器

(1.メモリ 増設用機器、2.OSバジョンアップに伴うプログラム・プログラム一式)

1-2.プログラム・プロダクト 構成表 : 平成 2年 8月 7日現在

**プログラム・プロダクト 構成表**  
(中国専利局向けM-220システム用)



(出所) 機材実施計画書 (平成 2年 8月 7日起案日) の別添 2.

供与機材名 : M-220システム 増設機器

(1.メモリ 増設用機器、2.OSバージョンアップに伴うプログラム・プロダクト一式)





## 2. 専門家の指導により作成された報告書、規則等リスト

### 1. 調査、計画、報告書

- (1) 中国専利局自動化工作部、専利局インフォーマ- (利用部門) ニズ 調査報告書 (1987-12)
- (2) 中国専利局自動化工作部、中国特許文献検索システム (CIPIS) システム  
計画書《基本構想書》 (1988-4)
- (3) 中国専利局自動化工作部、中国特許文献検索システム (CIPIS) システム  
概要説明書 (1989-1)
- (4) 日中共同WG、中国特許情報検索用教育システム端末装置増設に関する調査報告 (1989-3)
- (5) システム生成作業計画書 (1989-12)
- (6) 第三処、日本専門家、中国専利局検索システム (PILOT SYSTEM) (1990-4)

### 2. 規則、基準、マニュアル

- (1) 第五処、中国特許文献主題解析総則 (1987-5)
- (2) 第五処、同 細則 (1988-9)
- (3) 第三処、計算機応用システム開発段階におけるドキュメント作成暫定規定 (1987-7)
- (4) システム開発処、CIPIS システム詳細設計ドキュメント作成規範 (1989-3)
- (5) 第三処運用グループ、システム生成手順書 (1989-12)
- (6) 第三処運用グループ、専利局システム運用／操作マニュアル (1990-4)
- (7) 第三処、詳細設計及びプログラム 設計段階遵守基本原則 (内部試行) (1990-5)

(出所) 事務連絡 J-PAT-52、平成 2年 7月23日付





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