

International Congress and Computer (EDPS)

- In the case of CIE KYOTO'79 -

(TRANSNATIONAL ASSOCIATION, 1981-n°3, Congressalia)

Report prepared by the Marketing and Planning Section, Sales Division, Kyoto International Conference Hall, Takara-ike, Sakyo-ku, Kyoto 606, JAPAN

Conditions

1. OUTLINE OF THE CONGRESS

Title: 19th CIE Session (CIE KYOTO '79)

CIE: Commission Internationale de l'Eclairage

Duration: August 21 - 28, 1979

Attendants: 487 delegates and 181 accompanying persons

Events: Opening Plenary Session, General Assembly, Closing Plenary Session,

26 Technical Committee (TC) and Study Group (SG)

6 Administrative Meetings

7 Social Programs (SP)

9 Ladies' Programs (LP & GTTR) Get-together Tea Reception

6 Technical Visits (TV)

Informal Meetings

2. KINDS OF COMPUTER

MARUZEN MICRO MATE : Main memory ...28KB

Support memory (Floppy Disk 256KB/set x 2)

Office Computer with CXRT-display unit

3. DEVELOPMENT OF PROGRAMMING

Seminar of Prof. Takaaki MIYANO, Kyoto Sangyo Univ..... 13 pro.

MARUZEN Co., Ltd. (including MFG*)..... 5 pro.

Kyoto International Conference Hall (KICH)..... 4 pro.

*FMG: File Maintenance Generator

4. DATA-INPUT

Seminar of Prof. T. MIYANO

KICH (Kyoto International Conference Hall)

5. EXPENSES

Rental Fee for MARUZEN MICRO MATE.....400,000 Yen

Development of Programming.....550,000 Yen

Maintenance and Move-in & Move-out..... 150,000 Yen

6. SOURCES

The Organizing Committee of CIE KYOTO '79.....400,000 Yen

KICH (Kyoto International Conference Hall).....500,000 Yen

JTB (Japan Travel Bureau).....200,000 Yen

1. Background

Since 1975, this theme has been treated in Japan both by congress organizers and computer makers. In that period there was a forward movement towards computerization of business tasks in this domain: there seemed therefore to be a strong drive among computer makers to open up a new market for their products. As for the EDPS (Electric Data Processing System) of management of international congresses, interest was centered on the area of REGISTRATION. As you know, registration procedures of international congresses are burdensome and congress organizers have tried to cut down personnel expenses by rationalization and elimination of this work. Under these conditions, the computer has been seen as a standard-bearer of rationalization and elimination of needless work.

However, having only this view, the true meaning of EDPS in international congresses can not be made clear. So far, congress organizers, being entrusted with international congresses, have tried to rationalize the laborious jobs of registration. Though this is probably a correct attitude, on this basis alone, the computer can be nothing more than a tool for rationalization.

Our research was made to settle the role of computer in the whole frame of international congresses, including the organizing committee, participants and the secretariat run by the congress organizer.

We thought it appropriate to have the cooperation of a third party to carry on this research, not leaving it only to congress organizers and computer makers. With that purpose in mind, it would be ideal if the organizing committee and the participants of the congress could join in this research. But at present, this could be quite difficult, if not impossible to do. In the case of CIE KYOTO'79, we had the cooperation of the seminar of the university, an institute not involved in the pursuit of profits.

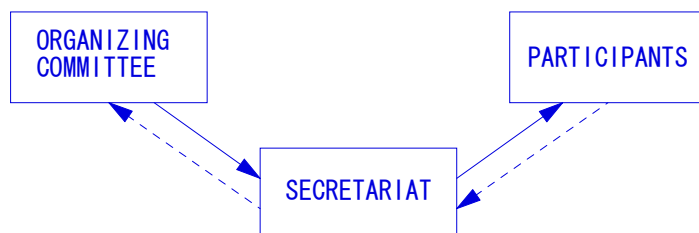
2. View point

We, staff of the Kyoto International Conference Hall, as the congress organizer, described the information flow in international congresses as follows;

to communicate the will of the organizing committee

to the participants

to communicate the will of the participants to the organizing committee



We set up the secretariat at the pivot of these two currents of communications

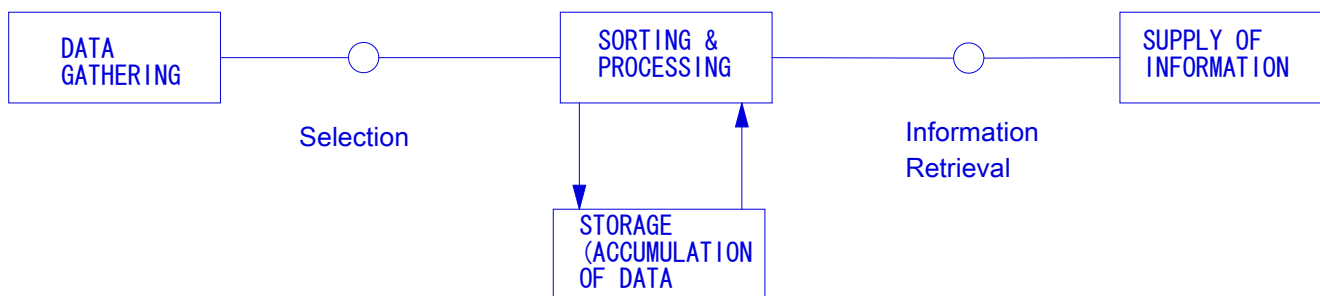
The congress organizer runs the secretariat. The role of the secretariat has come to be:

(1) to consult the organizing committee about the content of the information to be communicated to the participants, put that in order, print and forward it,

(2) to collect the application and requirements of the participants, and make reports with various classified data and lists, so that the organizing committee can make use of them as basic data for decision making,

(3) to promote efficiently the two currents of these communications.

The members of the seminar of the university considered the management of international congresses as **information management** and set up the following chart.



From this point of view, the secretariat can be regarded as the pivot from which to create and push communication between the organizing committee and the participants, while managing the information between them. If we do the jobs described on the above chart without EDPS, what would happen? It used to be the case that the secretariat was swamped by posting, classifying, retyping data etc., and it would be fairly difficult for the secretariat to provide necessary information on time. Do they feel like acting as promoter of communication between the organizing committee and the participants? (We believe they do not). Our purpose is to help secretariat out of this situation. In other words, to recover the function of the secretariat as the pivot of information by using EDPS in the international congresses.

EDPS of CIE KYOTO'79

1. Choice of computer

At the beginning, we discussed the use of large IBM computer installed in the Lighting Research Laboratory of Matsushita Electric Industrial Co., Ltd, however, there some apprehensions and difficulties were expected, such as leak of the company's secrets, limitation of working hours, cost-up due to an installation of a terminal and development of programming, facility management, etc. Considering the content and the number of participants expected at that time, it did not seem economical to use the large computer. So we took a new look at the problem, to locate those necessary and sufficient conditions required in the use of the computer.

Conditions of choice of the computer were as follows.

- (a) Possibility of system development and data-input and out-put by printer in the secretariat
 - (b) Possibility of operation and management by the staff of the secretariat
 - (c) To be able to handle 500-600 registrants for the time being
- Never to involve over-investment.

Thus, MARUZEN MICRO MATE was selected to fit those conditions. Generally a computer can be used on lease; however, a special agreement was made between Prof. T. MIYANO and the Maruzen Co., Ltd. that the computer might be rented for four months at a monthly fee of 100,000 yen.

2. System analysis

2-1 Purpose

The purpose of EDPS for the organizing committee of CIE KYOTO'79 was to make delegates' lists for the session and social activities, and to do data management for those. It had been expected we would be able to get hold of participants' data for TC, SP, LP and TC beforehand, to assign the session rooms, estimate the number of participants for each social activity, structure personal schedules, hold an informal meeting and a meeting outside the session site as well as to provide information to facilitate contacts among the participants during the session, in other words, so that the INFORMATION MANAGEMENT and INFORMATION SERVICE would have been backed up by it.

2-2 Analysis of work

We could not make a flow chart of the work beforehand, analyzing each step of procedure. So we were obliged to develop the programs for computer according to our experience and, after the session, we put them in order and made the flow chart.

2-3 Examination of input items and output lists

For the time being, we counted the items below as input data

- (a) Name, Reg.No., Country, Address and Speaking Language of the delegate
- (b) No. of Accompanying person(s) and her/his(their) name(s)
- (c) Hotel where staying
- (d) Entry for each TC, SG, SP, LP and TV
- (e) Amount to be paid and the amount paid

For lists printed out,

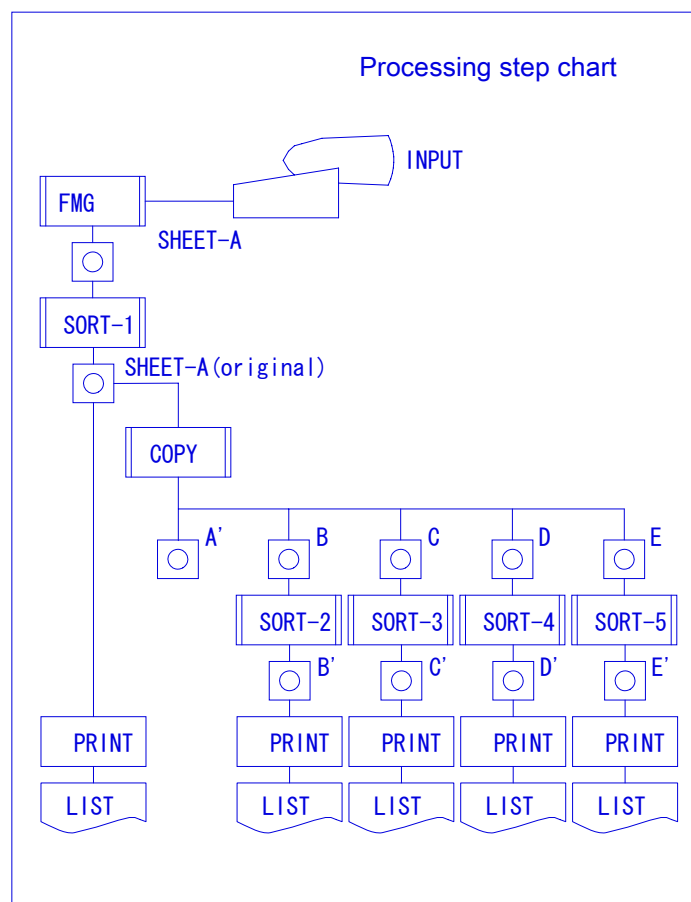
- (a) Delegates' and accompanying persons' list
- (b) TC and SG participants' list
- (c) SP, LP and TV participants' list
- (d) Classified total number list sorted by country and program
- (e) Registration List

With these rough ideas, we started programming and made a support system according to several requirements.

2-4 Processing steps

All data processing consists of three steps; input, data handling and output.

- (a) Input
 - Data input
 - Check of input data
- (b) Data Handling
 - File assembling, updating
 - Collection of data (merging, matching, classifying, sorting)
 - Calculating, summarizing
- (c) Out put
 - Listing (printing of output information, control of line and page, heading, control-break operation, etc.)
 - Displaying information on the CRT and sight check of data



Data input and updating had to be done by FMG (File Maintenance Generator), a software package provided by the computer maker, and the data were checked on visual display. The updating of data and file were all done on sheet A which was sorted in the order of Registration Number, and this Sheet "A" became an original file. Before printing out, five copies of sheet A; sheet A', B, C, D and E, should be sorted in the following orders. (Sheet-D and E were added later to meet the requirements).

- Sheet-A: Registration Number order (A': a back-up of Sheet-A).....Sort-1
 - Sheet-B: Country and alphabetical order.....Sort-2
 - Sheet-C: Alphabetical order.....Sort-3
 - Sheet-D: Hotel order.....Sort-4
 - Sheet-E: Affiliation order.....Sort-5
- Thus, each sheet was used to print out the necessary list.

2-5 File design

The storage medium of MICRO MATE is limited to a Flexible Disk (Floppy Disk). The file organization for processing objects are composed of both the Relative File (RF) and the Indexed Sequential File (ISF). At the time of CIE KYOTO'79, the file design was as follows.

File No.	File Name	File Structure	Length of Record	Cases	
No. 0	Delegate File	ISF	256 B(byte)	819	(The records in File No. 0 are linked with those in File No. 1, 2 and 3 by the use of the code that are data items in records in File No. 0. The codes identify the storage location of the records in File No. 1, 2 and 3.)
No. 1	Country File	RF	64 B	99	
No. 2	Hotel File	RF	32 B	99	
No. 3	Affiliation File	RF	128 B	130	

It should be carefully considered whether the delegate file should be a single volume file or multi volume file. In our case, we described on the single volume file in forming the record of delegate file, a master file. That is why the length of one record in the delegate file became such a long one as 256 bytes per one record.

The frequency of sorting was very high in processing the delegate file. Whenever the data were updated, every sorting from sort-1 to sort-5, had to be done. Since a collection of long records of 256 bytes per one record had to be sorted again, naturally it took a fairly long time.

If the items to be sorted can be grouped into one record and he related records can form a sub-file, the length of one record becomes 64 bytes and the sorting time will be shortened. However, when you print out the Registration list which covers nearly all the items, the print out time will become much longer. The printing speed of MICR MATE was actually 30 40 characters per second, which was not enough as an output device for our management. For example, it took a whole day to print up all the lists made for the session. Outline of File Design is shown below.

File map

0	INDEX	
		VTOC & others
4	File No. 0	Delegate File
67	File No. 1	Country File
69	File No. 2	Hotel File
70	File No. 3	Affiliation File

Delegate file

Item	Type word	Type word	Item	Type word	Type word
Reg. No.	N3	2	Amount paid	N7	4
Country	N2	2	GTTR & LP	N15	8
Name of Del.	A30	30	SP	N15	8
Title	A6	6	TV	N15	8
Assignment	A6	6	TC-1	N15	8
Assignment	A6	6	TC-2	N15	8
Assignment	A6	6	TC-3	N15	8
Language	A1	1	TC-4	N15	8
Hotel	N2	2	SG	N15	8
No. of Acc.	N1	1	Affiliation	N3	2
Name of Acc.	A30	30			
Name of Acc.	A30	30	N: Numeric		
Name of Acc.	A30	30	A: Alphabetical		
Name of Acc.	A30	30			
Amount to be paid	N7	4			

Country file

Item	Type word	Type word
Country Code	N2	2
Country Name	A20	20
Spare	A42	42

Hotel file

Item	Type word	Type word
Hotel Code	N2	2
Hotel Name	A20	20
Spare	A10	10

Affiliation file

Item	Type word	Type word
Affiliation Code	N2	2
Affiliation Name 1	A40	40
Affil. Name2	A40	40
Affil. Name3	A40	40
Spare	A6	6

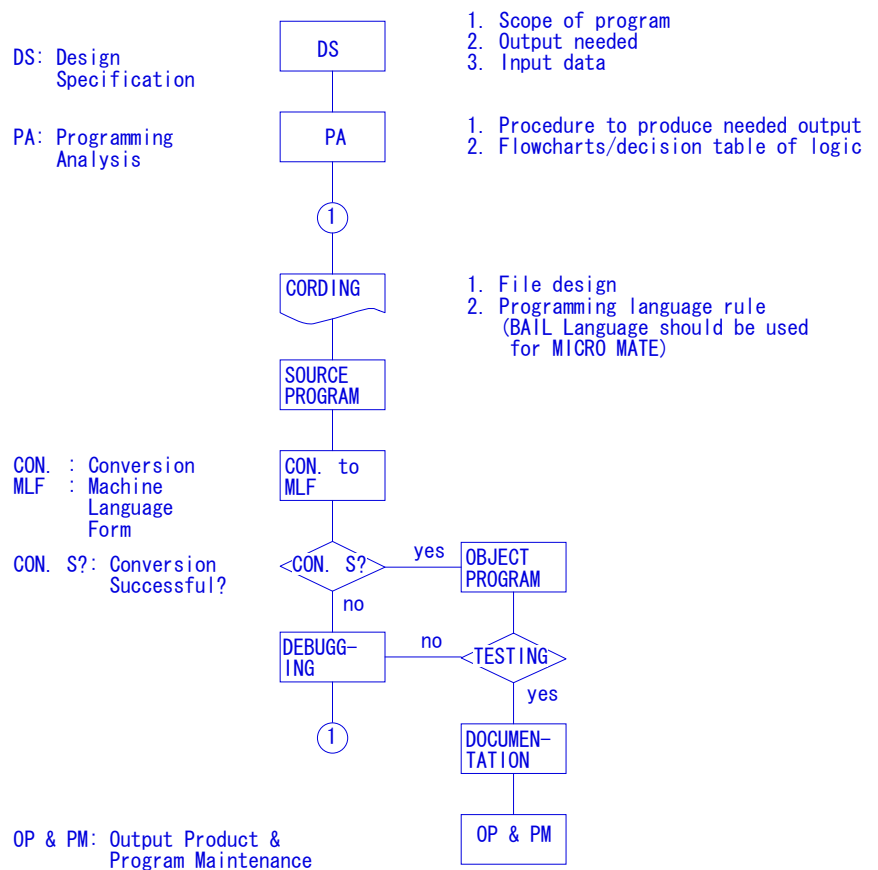
2-6 Programming

The programs required were composed of three patterns except the FMG (File Maintenance Generator).

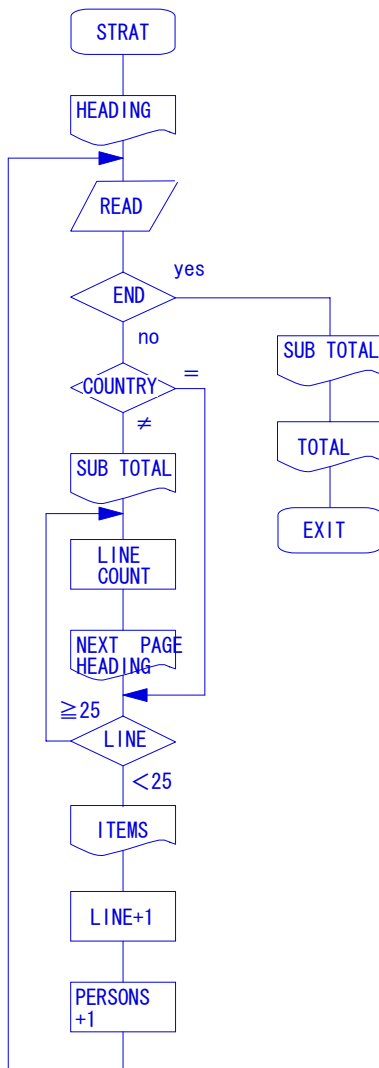
- Output of the lists concerning the delegates (registration data).
- Output of the lists concerning the TC & SG, SP, LP and TV participants
- Output of the classified total number list

The programming process is described in the chart and the list of programs developed and some typical program flowcharts are shown here under.

Programming process chart



Flow chart: delegates' list



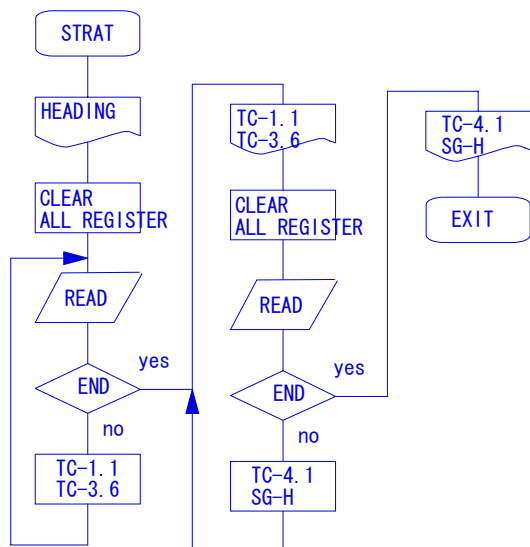
List of program

No.	Name of the program	Order	Items to be printed out
1	Delegates Number List 1	country	Country name, No. of Del., No. of Acc., Lan
2	Delegates Number List 2	TC, SG	TC & SG No., No. of attendants, Lan.
3	Delegates Number List 3	SP, LP, TV	SP, LP & TV No., No. of participants, Lan.
4	Registration Format	A, B, C	Reg. No., Name of Del., Lan., No. of Acc., Name of Acc., GTTR, LP, SP, TV, TC, SG Balance of payment
5	Delegates List	B	Reg. No. Name of Del., Lan., Hotel
6	Delegates and Accompanying Persons List	B	Reg. No. Name of Del., Lan., No. of Acc., Name of Acc., Hotel
7	SP List	A, B, C, D	Reg. No., Name of Del., Country, Lan, Hotel
8	GTTR & LP List	A, B, C, D	No. of Acc., Name of Acc
9	TV List	A, B, C, D	The same as those above
10	TC-1 List	A, B, C	The same as those above
11	TC-2 List	A, B, C	Reg. No., Name of Del., Country, Lan., Hotel, Assignment
12	TC-3 List	A, B, C	The same as those above
13	TC-4 List	A, B, C	The same as those above
14	SG List	A, B, C	The same as those above
15	Affiliation List	E	Reg. No., Name of Del., Country, Hotel, No. of Acc., Name of Acc.
16	Information List	A, B, C, D, E	Reg. No., Name of Del., Hotel, Country, Affiliation No., Name of Acc.
17	Hotel List	D	Reg. No., Name of Del., Country, No. of Acc., Name of Acc.
18	Reg. No. List	A	The same as those above
19	Alphabetical List	C	The same as those above
20	Admission Card	A	Reg. No., Name of Del., No. of Acc., Name of Acc., Country, SP, LP, TV
21	Reg. Fee List	A	Reg. No., Name of Del., Total amount required, Amount paid
22	FMG (File Maintenance Generator)	A	All the items

A: Reg. No. order
B: Country and alphabetical order
C: Alphabetical order
D: Hotel Order
E: Affiliation order

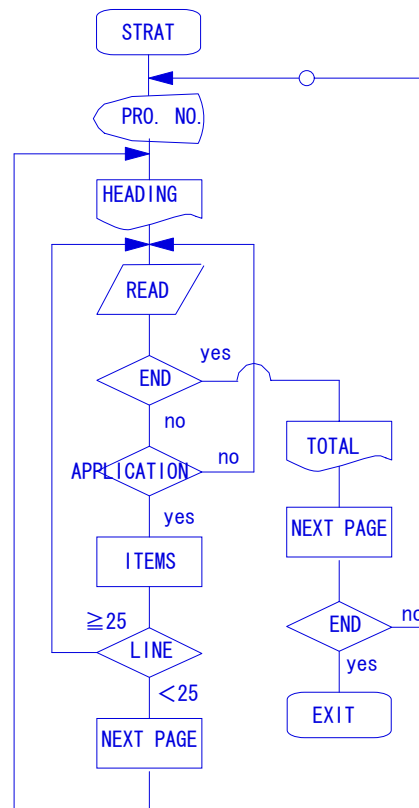
Reg.: Registration
Del.: Delegate
Acc.: Accompanying Person
Lan.: Language (English, French, German)

Flow chart: classified total number list (TC & SG)



Delegate File should be read twice because the number of TC and SG exceeds that of register.

Flow chart: SP, LP & TV List



3. Use of the lists

3-1 Before the session

It is necessary before the session for the organizing committee to know the total number of participants and their entries for the session and social activities. As you know, it is fairly difficult to collect these data just before the session. As many participants as possible therefore must be registered beforehand. The deadline of the registration was announced again by mail, with the classified total list and delegates and accompanying persons's list, to each National Committee (N/C) after the deadline, as well as to the Central Bureau in Paris, so as to give them a grasp of how registration was going. This was very effective in promoting the registration of those who had not yet registered in each N/C. It was very successful because we could confirm nearly 85 percent of the registrants two months before the session!

The more registrants are confirmed, the more valuable the lists become. TC list was used to assign rooms for session.

SP, LP and TV lists were used to make final reservations for dinner, excursions (busses, meals, etc.). The classified total list was used as basic data for making a final budget and was helpful in controlling the number of various materials to be made for the session. As those data were very accurate, we could hold the loss down to a minimum. Banquet list among the SP lists, helped greatly in making the seat arrangement. The lists, sorted in the order of Reg. No., country and alphabetical delegates' name, were all very convenient for making and checking upon the seat arrangement. Participants for Tea Ceremony, Flower arranging and Cloisonne Making in LP had to be grouped according to their languages (actually according to the countries in the same language group). Those lists, sorted in the alphabetical order of countries and participants' names were very useful. In TV, there was some organizations to be visited which required the affiliation and title of the participants. These lists were typed out separately.

For those Japanese members in charge of each TC or SG, it was important to confirm the entry of the members, and also for the organizing committee to confirm the entry of the members of the Board of Administration, Aviation Committee, Executive Committee and Delegation Head of each N/C. We often checked upon the schedule of those members in planning the informal meeting and receptions before and during the session. The nearer the session came, the more those requirements increased. So we had to add and change the output programs to meet their them. It goes without saying that the collation lists sorted in Reg. No. and alphabetical order were used for making the list of delegates, name cards, invitation cards, cards for pigeon boxes (mailing boxes), etc.

We have picked up some outstanding insight in our use of EDPS. Considering the experience obtained by EDPS this time, although the EDPS is really an effective means for elimination, it is inducible that our work load became greater. In other words, to the extent that there is much information available to the secretariat, the organizing committee requires more of the same.

3-2 During the session

It is the General Information Desk which unite the organizing committee with the participants during the session. At the beginning, we considered setting up the computer at the General Information Desk for Information Service to respond to the inquiries of the participants, using real time method. We gave that up, however, as we expected several difficulties because of the limitation of a computer of this type. Instead, it seemed to be more effective to refer to the lists collected by hand at General Information Desk where it was convenient to do daily jobs such as updating, printing out, etc. We delivered the necessary lists to the appropriate positions, updating data daily and printing out the necessary lists there. Pigeon Boxes and Bulletin Board were placed near the General Information Desk, as the means both for communicating the information of organizing committee to the participants and for communication among the participants. Registration information was delivered to the Registration Desks and the information for social activities was delivered to the SP, LP & TV desks.

These arrangements and kinds of list delivered to each position are shown below.

According to those arrangements, we could respond to the inquiries of the participants for the data needed. We delivered the TC list to each TC chairman through Pigeon Boxes. Inquiries about the attendance of other participants and their hotels were the most frequent. Some participants required the print out of the affiliation list. If we consider the whole amount of the information needed by them, only a part of the

List Name	General Information Desk	Reg Desk	SP, LP & TV Desk	Secretariat	Pigeon Box
Delegation Number List 1-3	*			*	
Registration Format	B, A	B	B	B, A	-
Delegates and Accompanying Persons' List	B	B	B	B	-
Information List	B, D	-	-	B, D	-
Affiliation List	E	-	-	E	-
Hotel List	D	-	D	D	-
TC & SG List	B	-	-	B	B
SP, LP & TV List	B	-	D	B	-
Alphabetical List	C	-	-	C	C
Reg. No. List	A	-	-	A	-

*: Country order, SP, LP & TV order, TC & SG order
 A: Reg. No. order
 B: Country and alphabetical order
 C: Alphabetical order
 D: Hotel order
 E: Affiliation order

the computer to be distributed to the participants in the case of CIE, and this was just the first step from the point of information service! However, it can be counted as a success that the General Information Desk responds positively to the inquiries of the participants.

As 22 SP, LP and TV programs were held in the CIE session, 22 kinds of tickets had to be made. There were those participants who had made the application for more than 10 programs. It was quite inconvenient for both the participants and the managing side to have so many tickets. Instead, we considered making an admission card by the computer print-out. On the front, the participating programs of each delegate and accompanying persons were printed out, and on the rear, the whole schedule of the programs had already been printed. It was put into a vinyl card case so that it might be brought by them on a rainy day. Though there was some apprehension about new applications and cancellations, there were no serious problems, thanks to the cooperation of the persons concerned. This greatly helped us saving the trouble of issuing the tickets and the cost of printing them. Each program list sorted in hotel order was well received by the travel agents, because they could easily get hold of the names of the persons, to facilitate transportation from the hotel.

3-3 After the session

The use of EDPS was really effective because the data were printed out right after the session. The print-out lists were forwarded as the record of the meeting to both the organizing committee and the Central Bureau in Paris after the session. And we used the computer for the closing of the account, though this was not expected at the beginning. That would have been expecting too much, because there were not allotted those items for a) invited guests b) bank charges and c) application of cancellation regulations, on the delegate file. Furthermore, it was very difficult to inquire into the fact of the case, when the cancellation regulations were irregularly applied.

Problems

Thus, the EDPS of CIE KYOTO'79 has been achieved and we would like to refer to the problems briefly, singling out some which actually took place.

1. It took too long for sorting and printing out

As was stated in the file design, in our system, once the data was modified, 5 sheets had to be sorted. It took 10-15 minutes for each sorting, and about an hour in total. And it took a whole day to print out all the files. We were obliged to work to around midnight to finish printing out and make several copies of them, and deliver them to the necessary section.

2. There was much to be desired for the use of the lists

The kinds of lists were so many that they could not be handled well by the staff using them during the session. That is because we had neither a sufficient orientation beforehand nor made enough effort to rearrange the lists.

3. Organizers sometimes required what was against the function and the performance of the computer (Maruzen micro mate)

Because of the lack of the investigation at the beginning, and the organizer's desire to correspond to the requirements of the organizing committee as far as possible, the organizer tended to demand more what was against the maintenance.

4. The regard for data change was insufficient

In our system, FMG (File Maintenance Generator) was used for data input and the file maintenance programs. In this case, when the data was changed, it was directly processed on the master file by type-in or key-in. Therefore the former record could not be kept track of after the correction file and a program for maintenance.

Conclusion

Our attempt was to make the various kinds of lists which promote communication between the sponsor and the participants at the stage of the organizing international congresses. This will lay down future lines of the EDPS in this field.

Compared with the plan at the beginning, we could fairly respond to additional requirements. This could not be achieved without the cooperation of the staff of the seminar of Prof. T. Miyano who ungrudgingly changed and added the program required each time. It would be difficult without this flexible back up system, to make future developments in this field.

We also appreciate the special arrangement from the Maruzen Co., Ltd. in that they received the staff of KICH for the education program of computer use and provided the computer on rental contract basis. That greatly helped to clear the barrier with respect to expenses. The marketability of EDPS in the international congress field would not be promising for the manufacturer and there is a budget limit for the sponsor for EDPS in his congress.

If we had not had the understanding and the cooperation of both Sponsor and the participants in the EDPS for their congress, it would be unlikely we would be able to step progressively into the future.

Communication system during the session

