

NOTE ON USE OF A SERVICE BUREAU

EXHIBIT 16

A service bureau is a means of making expensive equipment available to those organizations requiring the sophistication of the equipment but who only need it for a few hours a day or month. There are a number of different types of service bureau. They may be classified firstly by the type of work they do and the equipment they possess:

- secretarial, administrative, accounting bureau
- punched card, classical equipment bureau
- computer service bureau

The last two may further be classified according to the nature of the organization operating the bureau and the purpose for which it is operated:

- computer manufacturing companies generally possess a service bureau at their national or regional head offices to assist clients to install their own computers, to test programs and act as a sales aid.
- some manufacturing companies possess a computer which is specifically used for commercial service bureau work and is not intended primarily as an aid to sales.
- commercial service bureau organizations exist which hire a computer from a manufacturing company but are otherwise completely independent of the latter
- occasionally commercial or semi-commercial organizations group together and form a service bureau for their own internal use. It is possible to join such groups which are run on a non-profit basis.
- many commercial companies have computers which are not fully used. It is occasionally possible to arrange with them to perform a certain amount of work on a contract basis. This usually is cheaper than going through a commercial service bureau.
- occasionally universities and scientific research institutes have computers which are not fully used. It is possible to arrange with them to perform a certain amount of work on a contract basis.

Advantages of Using a Service Bureau

- no investment in expensive equipment which quickly becomes outdated
- no responsibility for machine maintenance
- no need to have computer experts on the staff at the NGO
- only use and pay for the time required to process the data
- data can be delivered to the service bureau on normal typed documents. Transfer of the information to punched cards, etc. is all done by the bureau. The final results are returned to the NGO.

How Would an NGO Make Use of a Service Bureau

a) Initial analysis and file creation

- it is vital in data processing to be able to define clearly what it is hoped to achieve by using more sophisticated methods. To do this, it is useful to discuss the problem with an expert from one or more of the service bureaux, or from an independent company of consultants
- once the problem has been defined, a set of instructions can be written (a 'program' for the computer) and tested to deal with all the requirements and exceptions of a particular problem. If the problem is complex, several programs may be required.
- in order to deal with the data on a computer and at computer speeds, information currently in a typed form on cards or documents must first be converted to punched cards from which the computer can convert it to tape. In other words, most card files must be converted to magnetic tape files.
- once this stage is reached, processing can be done on a regular daily or monthly basis.

b) Regular processing

- information coming to the NGO each day which needs processing, e.g. changes of address or invoices, etc. is dealt with, under the new system very quickly. All matters of routine have been transferred to the computer, only creative decisions need to be

Exhibit 16

taken by the personnel; with an invoice for example, it might perhaps only be necessary to indicate the member's or client's number, code number of the publication he ordered and the discount to which he is entitled. This information would be punched onto a card at the service bureau (it could be punched onto the card in the NGO offices if there were sufficient to justify the hire of the equipment) together with all other similar changes during the month (say).

- the monthly processing would then be done during half an hours computer time each month and the printed invoices would then be returned to the NGO, together with monthly account details.
- in this way, the personnel is freed for more creative non-routine work which is usually more essential to furthering the objectives of the NGO.