

COMPUTERIZATION OF LEGAL MATERIAL

Memorandum by the Government of Barbados

We are committed to bringing to Barbados the advantages of "jurimetrics" just as Inland Revenue and National Insurance have made use of computers to improve their operations.

Computer Application

Barbados wishes to discuss computer application in the following areas:

- (i) *Statutes and related materials:*
 - (a) Legislative drafting of statutes and statutory instruments;
 - (b) General revisions of statutes and statutory instruments;
 - (c) Assistance in the preparation of access modes to those materials, that is (i) text retrieval; (ii) word retrieval and KWIC indices; storage and maintenances of statutory tables; cross-references, and records of amendments, etc.
- (ii) *Case Law Material*
 - (a) the storage and retrieval of relevant West Indian cases, preferably in full-text form;
 - (b) the development of annotations to statute law from the stored material;
 - (c) the development of a West Indian retrieval bureau for statutory and case law material for judges, legislators, practitioners, law teachers and students.
- (iii) *Property registry systems and similar registers*
 - (a) Land registry systems
 - (b) Chattel registry systems
 - (c) Foreign and domestic company registry systems.
- (iv) *Later Computer Application*
 - (a) Law firm application
 - (i) firm accounting
 - (ii) text processing and control.
 - (b) Legal and social statistical application
 - (i) nature and frequency of criminal and other actions
 - (ii) other data acquired in the administration of justice of a demograhic nature
 - (iii) projecting probable social and legal consequences of specific suggestions for variations in the law.

At the present time we view computer applications in terms of priorities. That is to say, it becomes necessary to expend our energies and resources where the most immediate and beneficial results can be obtained most economically. Since none of us live in

isolation what may not be possible for us to achieve alone might be practical in co-operation with others. So we must consider computer applications in those terms also.

Other Concerns

The Canada memorandum mentioned the possibility of a Commonwealth Legal Data Base and a Commonwealth Law Reform Base. Barbados wishes to make some observations in both these matters.

But first it seems necessary to address ourselves to those matters any developing country must look at before committing itself to the technology of the more developed world.

Essentially, a computer puts into the hands of its user the routine, clerical capabilities of millions of servants, depending on the power of the hardware and the sophistication of the software. Its use in legal areas is to help deliver legal services more effectively and efficiently. This should result in lower legal costs to the public and an increase in the volume of legal services delivered.

A developing country has two immediate concerns. Will computer use increase or decrease local employment? Will it make the country captive of the technology of the developed Nations?

The view in Barbados is that the employment sensitivity can be reduced in the community if the data base is compiled locally. That appears to be the most labour intensive area of computer use, as distinct from computer development or improvement. It becomes evident then that a developing country such as Barbados must have at least the human resources to convert material to machine readable form before embracing computerization of the law. Fortunately we have that resource within our community; it needs only to be given an opportunity to increase and be used.

The intellectual or software component associated with the use of computers in law is a more difficult problem for us. It is evident—and the Canadian experience bears out our assumption—that a small community can as easily, and sometimes more economically, develop software than a larger developed country. Two things would seem necessary: the every-day use of computers and the numbers of programmers and other technical personnel available locally. The creation of software, an intellectual achievement, need not be the monopoly of the more industrially developed nations.

From the Canada memorandum it seems that the developed use of computers in the area of legal information in Canada is now a mix of public and private ownership of computer software. We would be inter-

ested in learning how that development might affect us, were we to move to the use of computers.

Would the software of Commonwealth governments be made available freely to one another? To what extent would private operators of computer services permit the use of its software under licence or otherwise? Like any other independent country Barbados would prefer to have local control over the suppliers of legal services by computer application. (This problem will be more familiar as the problem of the transfer of technology from developed to developing nations). The question requires consideration as we move towards a commitment to computer applications for a country's legal data.

The local physical environment must also be considered when considering computers and their use in developing legal services. This is a matter that a developed nation might not even think about anymore, but we must.

To be economical, efficient and effective, the hardware must have a suitable home; that is, it must be in a controlled environment. This means reliable, controllable air-conditioning. If there are frequent or long periods of electrical break-downs a back-up system would seem to us to be imperative.

Both for the manipulation of the computer base, and the safe storage, off-line, of both software and the machine readable data base (that is, in a fixed form on tape, discs or otherwise), the physical environment can be crucial. We in Barbados feel ourselves fortunate in having a suitable physical environment in that regard.

Another environmental concern is the reliability of telecommunication services in a country. The computer hardware may be next door or across the country or outside it. Its location may be a result of economies of scale or the physical environment available for it. In the latter cases, it is essential that telecommunication be used and that they be reliable and within the economic means of the country. Again, we in Barbados are grateful that we have a reliable telecommunication system.

The Barbados Position and Priorities

In terms of what we conceive to be our priorities today, we wish to deal more fully with the computer applications described earlier, that is, statutory and related materials; case law materials; property and other registry systems. We shall discuss them briefly in the order of priorities as we presently see them.

(i) Registry systems

As a country develops it has need to expedite documents of title, etc. through its government operated registry systems—we speak particularly here of the legally related systems for real property, chattels, charges, company incorporation, and such like.

Delays within the system slow transactions and increase the costs of development with the consequence that business becomes more difficult generally. As we are now modernizing our registry systems we are most anxious to apply the advantages

of computers to those systems. The increase of human staff merely slows down such systems when the numbers become large, the data volume great, and speedy pass-through of data is required. (A consideration of the divorce registry system in the Department of Justice in Canada and its volume of work will substantiate that statement).

Therefore, Barbados intends, with all dispatch, to endeavour to have computers used in its registry systems. To that end we need studies done. For instance, can we in that application share time with the hardware used by Inland Revenue or must we acquire additional hardware?

Since Barbados is a member of the Caribbean Community of nations (CARICOM), we might well have to consult with Caricom to see if a joint or co-operative or shared use of hardware can feasibly be developed for these systems so that costs could be spread around and the services extended to neighbouring states.

In our case in any event, we see our first priority as being the development of computer-assisted registry systems. Nor are we unaware of the great difficulty inherent in the development of such systems. Hence our interest in the proprietary rights to software developed elsewhere for systems of this kind.

(ii) Statutory and related Materials

Barbados places a very high priority on the development of computer assisted drafting and publication of its laws. There are sound reasons for this emphasis on statutory material. It is increasingly evident that the State and its development is inhibited by two things in this area.

Firstly in Barbados, as in other developing countries to a like or greater degree, no doubt, the legal resources available to government are insufficient. Too few lawyers handling too many matters results in a decrease in the quality of the legal services delivered to government or in the quantity of those services. Sometimes the pressure on this legal resource may result in both a loss of quality and a loss of quantity.

A country's development is adversely affected when its legislative drafters are unable to produce legislation effectively and on a parliamentary schedule.

And legal opinions supplied to officials of government relating to statutory materials are delayed when access to the material is difficult or unreliable.

We are convinced that one of the practical ways to redress the imbalance caused by the leanness of our legal resources in government is to avail ourselves of the computer's ability to supply routine and massive clerical services. In this way our lawyers are given the time to exercise their professional functions while the "clerks" give them access to the legal materials.

In terms of legislative drafting there is another factor inhibiting the processing of legislation. Again this factor may exist elsewhere in greater or less

degree. The converting of draft legislation into Bills for the legislature involves a printing process. That is, at some point the drafter's efforts are key punched to produce a printed copy for Parliament to work with. Because of modern progress in printing the reliability of older printing methods has been destroyed in many cases without being replaced by a modern ability to adapt to or make use of newer printing methods.

This situation can do great harm to the effectiveness, efficiency and morale of a drafting service—and can leave a government's legislative programme vulnerable to a few, sometimes a surprisingly few, people. To see what others were doing about this problem Barbados sent its Chief Parliamentary Counsel to examine a number of solutions developed in Canada. The purpose was to see if any of those solutions were within the means of Barbados.

We discovered a number of electronic devices and systems being used. The computer application described in the Canada report was one; the text processing equipment used in Newfoundland and Nova Scotia were others, which differed in some significant respects in relation to later computer use of the data bases acquired in each case.

In Barbados's position the text-processing systems of either Provinces could remove our immediate printing problems and they are within our means. It is a tempting short-term solution.

Yet, a developing country, such as we are, is at the outset vulnerable to the servicing resources available within the country. Reliance for legislation on a text processing system that is only put back into service after great delay when it breaks down is a hindrance, not a help. Any needed back-up will likely not be available. Our legislative services would then be dependant on outside service support—not an attractive thought. But it is a possible way out and it would permit us to store and retrieve statutory materials and to print by photocopying, at least. For a developing country that method must be looked at closely.

The economies of scale and uses mentioned in the Canada report would operate as well between Barbados and the Caribbean region. If there were a possibility of time-sharing the use of a computer within Barbados for legislation, or developing a complex of mini-computers and a shared "mother" computer for the region, it would be more advantageous in the long run to both Barbados and the region to concentrate on the development of that kind of an operation.

Our reasons for so thinking are not startling nor self-serving. We think that the law school, the lesser developed countries nearby, our drafting staffs, judges and lawyers would all benefit, if we could organize a complex of a large computer accessible to remote mini-computers or remote terminals.

Not only could a large data base be considered feasible in such circumstances but the quality of the

available legal resources increased. Naturally, no country wishes to have its statutory data base in foreign hands, however friendly, so a system such as we contemplate could avoid that difficulty. Its similarity to the position in Canada is obvious.

We hope, therefore, that studies can get underway quickly to help us put into use in the Caribbean region a practical and economic system of text storage, processing and retrieval of statutory materials in aid of our legal communities and our peoples.

(iii) *Case Law Materials*

This application has a low priority with us, as yet. One only has to realize how difficult it is sometimes to get to our statutory data to understand why this is so.

We are aware that if we can develop computer facilities for the statutory materials, it becomes then a practical matter to think about storing, processing and retrieving case law. Thereafter it becomes at least possible to think about participating in a system of access to similar data bases in the other more developed Commonwealth countries.

(iv) *Later Computer Application*

We would not expect our attorneys-at-law to be any less traditionalists than their Canadian colleagues. Indeed, in observing the recent forward-looking activities of the legal profession in that country we are inclined to think that our attorneys-at-law might at this time be even less enamoured of computers than the average practising Canadian lawyer.

A newer generation of practitioners are coming out of our law schools who might be more tractable to computer assistance in law if they have the opportunity to become familiar with computer use within the law school.

This consequence might be expected after the development of regional computer application to statutory materials in a system involving the law teachers. (The students on the LL.M Course in Legislative Drafting at the Faculty of Law have been introduced to the concepts of computer text processing as part of that Course though no practical means are available now to demonstrate uses in drafting).

Subsequent applications of the computer in the non-government professional sector must of necessity develop more slowly in Barbados.

Summary of Application Consideration

We stress our firm conviction that it is in the national and professional interest of Barbados particularly, and of the other states within Caricom, generally, that we proceed to the use of computers in legal information processing as soon as possible.

Our proposals concerning how this might be done most rapidly and effectively are given later in this response, after we have discussed the role of the Commonwealth Secretariat in the development of legal data bases.

Commonwealth Legal Data Base or Bank

General

Again it is our happy privilege to commend the Government of Canada for its report on this data base. The outline is concise and the problems set out clearly in the report.

We do wish to make a few general observations from our perspective as a developing country.

The Commonwealth Secretariat already provides Barbados, for one, with a great deal of information about statutory materials developed elsewhere in the Commonwealth. This service is not mentioned in the Canada report; Canada would not be expected to be aware of the extent Barbados, and perhaps other Commonwealth countries, call upon the Secretariat to locate law reform and statutory material for comparison purposes.

We are grateful and indebted to the Secretariat for this service. It would only be an extended development of that service if it were to be computerized. But it would make the service more effective and efficient. The economies of such an operation might be in doubt at the moment. With the development of computer assisted drafting elsewhere in the Commonwealth, but economies of such a service could become real enough to make such a service attractive as well as advantageous to developing countries.

In commenting on the Commonwealth data bank we have to observe that if a developing country is to persuade or fling itself from the nineteenth Century, as some of us must, into the 21st Century, as is increasingly necessary, information and technology are the two most important vehicles at its command for the purpose.

In isolation these vehicles may possibly be out of the economic or material reach of many of us. Together, they are not. We will make a proposal at the conclusion of these remarks for the consideration of the Law Ministers of the Commonwealth.

Commonwealth Law Reform:

The computer professional's adage—garbage in garbage out—draws attention to an unfortunate paradox of the modern real world: in the garbage of the rich one may find food for the starving.

We are quick to acknowledge that the adage was not used in terms of law reform reports so much as pointing out that you get from computer data bases no better than you put in. There is no disagreement with that. But we do have two comments to make.

While the Commonwealth countries have all more or less acquired sophisticated legal institutions, we do not all have the same economic or social environments. Our legal institutions operate within and for our individual societies or communities.

Therefore we have a need to know not only what Canada or Australia is thinking in terms of law reform but also what their many political subdivisions are considering. Similarly, there is a need to

know what other less commercialized societies of the Commonwealth are thinking and writing in terms of law reform. The developed jurisdictions did not get to their recommendations without a history of legal, social or commercial development peculiar to them. As a consequence, what they are recommending at a particular time might not be as suitable to another jurisdiction as that being proposed for a less complex society.

Why does a developed or a developing country of the Commonwealth *need* to know what is being done elsewhere? The Canada report answers that question. It is wasteful of the resources of the Commonwealth countries for each of us to be researching similar problems in isolation. Computer programmers refer to this resource wastage as re-inventing the wheel.

The second comment we wish to make on the subject of a law reform base is this. We think it better to let each country judge for itself the usefulness of any law reform information compiled in a data base for Commonwealth use. What has been discarded as a practical solution by one country or jurisdiction may point out a saving solution for a law reform body in another jurisdiction.

It would be a very difficult task indeed for any one to make value judgments of this kind on a data base—that is best done “at home” in each case, in our view.

Once more we must express our appreciation to the Government of Canada for putting this subject and the problems succinctly to the Conference.

Legal Information Services:

The Canada report touched briefly upon another phase of legal information with which, we submit, we are all concerned. This is the fact, which was recognised in Canada by the creation of the Canadian Law Information Council, that the needs of all those concerned with legal information go beyond merely computerizing legal information. It is necessary to have regard to texts on local law, accessibility to local law, educating the public in the administration of justice, the commissioning of studies, the publication of court cases, etc. whether or not any of all of these matters make use of computers. Also some legal materials are more effectively, efficiently and economically stored on microfilm or by other devices. Perhaps, also, all modern storage and retrieval systems should be co-ordinated, interchangeable or integrated into one whole legal information system.

A body of this kind for regions of the Commonwealth might be a useful device to assist in the supervision and harmonization of regional development in those areas.

Perhaps the Minister of Justice for Canada might be persuaded to prepare a report on the background, composition and work of the Canadian Law Information Council. Such a report might be of use to Commonwealth members. If the Minister were good enough to have such a report prepared, the Sec-

retariat might be inclined to circulate it to the Law Ministers for their perusal.

Proposals for Consideration of Ministers

The Attorney-General of Barbados considers it timely and in the interests of the Commonwealth that certain following proposals be put forward by him for consideration at this Conference.

First Proposal

It is proposed that for the purposes of studying and developing computer application to legal information, the Commonwealth be divided into regions.

The regions should be so constituted (in our view) that each one has within it a country with developed experience and technology in computerizing legal information.

The regional studies should be co-ordinated by the Commonwealth Secretariat to ensure compatibility of systems and programmes and the exchange of progress reports, studies and knowledge of pilot projects underway in each region.

It is thought that the Committee might be voluntary and drawn from a select group of lawyers and technicians from each regional grouping, but responsible to the Secretariat for keeping it advised of progress and problems.

Second Proposal

It is proposed that one of those regions be the Commonwealth countries of Caricom and that action be taken as soon as possible to organize and fund two pilot projects in computer application to law; namely

- (a) the use of computer storage of records in property registers and company registers in the states of Caricom, in a regional system, a co-ordinated system or individual systems, as circumstances require; and
- (b) a computer assisted drafting and publication of laws project to comprehend the needs of regional governments in preparing legislation, the needs of the region in the storage and dissemination of statutory information; the needs of the Faculty of Law of the University of the West Indies in the education of lawyers; the needs of the judiciary, public officials, practitioners and the public in obtaining inexpensive and quick access to legislative materials; and the need to develop indigenous expertise in this application of computers to law.

Third Proposal

It is proposed that Law Ministers consider the setting up within the Commonwealth Secretariat

of a data base in machine readable form consisting of

- (a) statutory material from the members of the Commonwealth; and
- (b) law reform reports from the various law reform bodies within the Commonwealth.

To some extent this material is already available in written form within the Secretariat or could be made available by a system of regular delivery of the written matter to the Secretariat.

It becomes necessary to consider and respond to the queries raised by the Canada report in relation to both data bases.

We think the information should be full-text of the printed material. In some cases this may be available already in machine readable form. In other cases, it may be possible to have the originating body use computer facilities to develop machine readable law reform reports.

The printing firms used in other cases may be able to provide machine readable text from the printing process. This would have to be examined.

In all other cases, the keying to convert text to machine readable form might be done in the lesser developed countries under contract from the Secretariat. This would encourage and support computer development even if the actual conversion is then done by scanning equipment elsewhere.

The cost of making and updating the data base when made from written material might be borne by the Secretariat. The machine readable data already made by a country might be donated to the Secretariat. This can be more fully examined when the form of the material and its volume are known. The answer to the other queries would have to be dealt with when the needs and the available facilities are known.

Conclusion

We agree with the Canada report that the computer will affect our lives profoundly in the future; we hope that the Law Ministers will concur with us when we urge co-operation within the Commonwealth to develop, as quickly as finances and circumstances permit, a system to apply computers in the enhancement of our legal information resources.

Moreover, we view this as a realistic way to slow down and reverse the trend whereby developed nations are widening the technological gap between them and the developing countries. It is surely in all our interests to take the measures at hand to achieve both those objectives.