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ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN Subregional Headquarters for the Caribbean

CARIBBEAN COMMUNITY (CARICOM) SECRETARIAT

REPORT OF THE MEETING ON

REGIONAL INFORMATION SYSTEM STRATEGY FOR THE CARIBBEAN

Port of Spain, Trinidad and Tobago, 27-29 May 1987



Organized jointly by the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) Subregional Headquarters for the Caribbean and the Caribbean Community (CARICOM) Secretariat, under the sponsorship of the International Development Research Centre (IDRC) of Canada.



UNITED NATIONS

ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN Subregional Headquarters for the Caribbean

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OPENING SESSION

- 1. The meeting which was convened to discuss the consultant's report: A regional information system strategy for the Caribbean to the Year 2000 was opened by Ms. Wilma Primus, Manager of the Caribbean Documentation Centre. On behalf of the Director of the Economic Commission for Latin America and the Caribbean and the Caribbean Development and Co-operation Committee (ECLAC/CDCC) Secretariat, she welcomed the system managers, representatives of member states and other specialists to the meeting.
- 2. Ms. Primus briefly analyzed ECLAC's involvement in the development of regional information systems since the 1977 meeting on Regional Cooperation for Access to Information in the Caribbean and the Third Session of the Caribbean Development and Co-operation Committee which had mandated the ECLAC Subregional Headquarters for the Caribbean in 1979 to establish and co-ordinate sectoral information systems in priority areas. She stressed the need to identify and resolve policy issues as a means of working toward the effective co-ordination of the existing and proposed regional information systems.
- 3. Ms. Carol Collins, Chief, Information and Documentation Section of the Caribbean Community (CARICOM) Secretariat, in her introductory statement, traced the development of the Secretariat's involvement in regional and national information policy since 1974. Initially the emphasis had been on the development of the public library systems, but this role had been extended to include assistance in the development of national information policies and systems in the OECS states. The

informal relationship developed with the ECLAC/CDCC Secretariat had involved the co-ordination of initiatives for the establishment of the regional information systems which had been developed in the past decade. These consultations had resulted from the recognition of the need for a durable, yet flexible framework for the co-ordination and exchange of information in the region.

- Martha Stone, Director of Information Sciences International Development Research Centre (IDRC), speaking from perspective of a funding agency, underscored the importance of a coordinated development of regional information systems in minimizing costly duplication and unnecessary overlap. Ms. Stone pointed to the need for general acceptance of a strategy for the development of the systems and saw the recommendations emerging from the meeting as a tool for the guidance of donor agencies and national bodies. supported the development of national, regional and subregional information systems since the seventies, and this support had also included the definition of a framework to guide the determination of priorities in the structuring of regional information systems including the very practical trend toward the development of problem-oriented systems.
- 5. Ms. Stone commended the consultant on the production of a valuable document which, for the first time has recorded the state of the regional information systems, identified strengths and weaknesses

and proposed a regional strategy for the harmonious development of regional information systems.

ELECTION OF OFFICERS

6. The following officers of the meeting were appointed:

Chairman:

Mr. Louis Wiltshire, CARICOM

Rapporteurs:

Ms. Yvonne Stephenson, University of Guyana

Ms. Sue Evan-Wong, OECS

The draft agenda was adopted.

- 7. In outlining the procedures to be followed, the Chairman explained that as the main focus of the meeting was the working document the consultant would present the contents of the document in stages with subsequent discussion by the meeting of the issues raised. The consultant's proposals as modified by recommendations of the meeting, would form the recommended strategy for the development of the regional information systems in the Caribbean to the year 2000.
- 8. He also explained that the CARICOM Secretariat and the ECLAC Subregional Headquarters for the Caribbean, in recognition of the valuable contribution which the consultant's report and the meeting's recommendations would make to the development of information systems in the region, expected to present the results of the meetings to the CARICOM Heads of Government and to the Caribbean Development and Cooperation Committee after circulation to member states.

BACKGROUND AND DEFINITIONS

9. The area of 'information' under consideration was defined as:

"all data concerning the present state, progress or results of

research and development, and concerning the use of such results together with all other applicable data which might be used in technical or research and developmental activities".

10. Priority sectors, based on the stated priorities of member states, were defined as:

AGRICULTURE
DISASTER PREPAREDNESS
CULTURE
EDUCATION
ENERGY
ENVIRONMENT
INDUSTRY
TRADE
TOURISM
PUBLIC HEALTH AND PREVENTIVE MEDECINE
SOCIO-ECONOMIC PLANNING
UNEMPLOYMENT

- 11. While recognizing that culture might not be designated a priority development area by the member states, the meeting requested that culture be included in the areas for the development of regional information systems.
- 12. The geographical area under consideration was the membership of the CDCC the CARICOM member states, as well as Cuba, Haiti, the Dominican Republic, Suriname, the Netherlands Antilles, the British and United States Virgin Islands and Aruba. It was also proposed by the meeting that the other English-speaking states of the Caribbean, which are also members of the Caribbean Development Bank, be invited in the future to participate in the regional information systems.

REGIONAL INFORMATION SYSTEMS

13. The consultant defined the role which regional information systems should play in collecting, processing and disseminating

information in the designated areas. The meeting confirmed that there was particular need for systematic development and testing of the systems' structures, based on the needs of the users and on the relevance of the outputs of the system to the needs of the users, both in content and in form.

- 14. The Caribbean Trade Information System (CARTIS) was seen as an example of the systematic development of a regional information system, in which the regional information system was designed in consultation with the member states, and in which the structure of the databases is currently being tested in two countries as the basis for the expansion to other member states.
- 15. The meeting requested that the role of the existing national coordinating bodies for information be recognized in the relationships
 between the regional focal points of the systems and the member states.
 The national co-ordinating bodies would be able to facilitate policy
 decisions and in some cases, positive action relating to the national
 participation in regional information systems and would subsequently be
 able to monitor the activities of national sectoral focal points of the
 regional information systems.
- 16. In addition to the existing and proposed systems listed in the consultant's report, it was proposed that there should be a study on the feasibility of a regional information system on culture. This study was expected to take into consideration the current initiatives including CARINDEX and the Integrated Library and Information System

- (ILIS) of the University of the West Indies which were proposed for consideration in the study as the basis for the development of a regional information system on culture.
- 17. Lack of access to data held in the region, particularly unpublished data, was recognized as a potential barrier to information held in the region, and it was therefore proposed that this problem be treated at the national level to facilitate the development of the regional information systems for the mutual benefit of all member states.

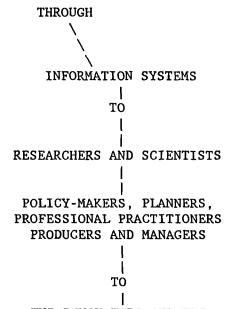
MANDATES

18. The fact that several organizations have general mandates which could include the development and co-ordination of regional information systems has resulted in several initiatives for systems which might result in duplication and overlap. Informal consultations between the agencies involved, as well as the current policy exercise, were expected to result in harmonization and maximum benefits from the regional systems.

SERVICES REQUIRED FROM THE REGIONAL INFORMATION SYSTEMS

19. In addition to the services currently provided by the systems, it was generally agreed that the systems should deliver outputs and services in formats appropriate to all users. The systems are therefore expected to be responsive to the needs of users and to have as their ultimate goal:

TRANSMITTING THE RESULTS OF RESEARCH, DEVELOPMENT PROJECTS AND OTHER RELEVANT INFORMATION



THE INNOVATORS AND THE ULTIMATE BENEFICIARIES - 'THE GENERAL PUBLIC' NATIONAL AND REGIONAL INFORMATION INFRASTRUCTURE

- 20. The development of regional information systems and the corresponding national sectoral focal points have, as a result of resources committed by the governments of the region and by some donor agencies, demonstrated significant developments over the past decade. Each regional system would require a centre with a relevant information base to be chosen as a regional co-ordinating focal point and this would require the parent institution to be able to support the role of regional focal point.
- 21. The availability of human resources to manage and operate the information systems is still, however, a significant problem. For the services to achieve their full potential there is a need for professionals in several areas of information activities:

- librarians to develop the bibliographical information systems;
- statisticians to develop the quantitative information systems;
- $\mbox{{\sc mass}}$ media professionals for the repackaging of information held by the systems.
- 22. While training has been provided in these areas and most national centres have achieved minimum staffing, the meeting confirmed that there is urgent need for further training in the management of information resources and in most countries there was also the need for the development of a suitable career structure to ensure that information professionals in place and those subsequently trained will remain available to the region.
- 23. The meeting further recommended maximizing the resources directed toward training while ensuring the introduction of information technologies to the widest audience. This was expected to reduce the duplication in the region of short-term courses.

NATIONAL INFORMATION POLICIES

24. National information policy statements currently concentrate on the development of libraries and these have not yet included the other areas of the information sector. The meeting therefore recommended that the 'information sector' be recognized as a valuable resource which if co-ordinated at the national level would be able to serve all levels of the population.

REGIONAL AND INTERNATIONAL ORGANIZATIONS - A ROLE IN THE DEVELOPMENT OF REGIONAL INFORMATION SYSTEMS

Regional organizations

25. Several organizations have been active in the development of regional information systems particularly the UNECLAC Subregional Headquarters for the Caribbean, the CARICOM Secretariat, the Caribbean Development Bank and the University of the West Indies, mainly in relation to their programme areas. These organizations in the establishment of the regional information systems have provided valuable technical assistance to the member states.

International organizations

26. IDRC and Unesco have been the main organizations providing assistance for information to support national and regional priorities. They have therefore both played a significant role in financial and technical assistance in several areas including the application of new technologies to regional information activities.

RECOMMENDED INFORMATION SYSTEMS

27. The meeting agreed that the systems could be grouped into three main categories: Science and Tehcnology, Socio-Economic Information and the Humanities. It was also agreed that systems with potential for overlap should be developed in consultation with each other and the list of recommended systems be detailed in the final version of the consultant's report. Particular mention was made of the need for compatible data structures to ensure communication between the systems.

- 28. The implementation of a mechanism to test the viability of each system prior to full implementation was recommended by the meeting as a means of providing information on human, technical and financial resource requirements at the national and regional levels, as well as user requirements and related outputs and services.
- 29. Particular mention was made of the need for compatible data structures to ensure communication between the systems. The maintenance of the integrity of regional standards was considered to be a priority with assistance where possible to the national nodes to enable them to meet these standards.

MECHANISMS WHICH FACILITATE INFORMATION FLOW

- 30. The meeting dealt with these mechanisms libraries, documentation centres, archives, statistical services, data and telecommunication services and mass communication facilities in relation to their role in facilitating transfer of the data held by the regional information systems. Libraries, the main centres for the dissemination of information, provide access and referral to the bibliographical and quantitative data services while being able to identify to the mass media significant items for wider dissemination.
- 31. Facilities for the electronic transfer of data within the region are not entirely in place, and it was therefore recommended that specialists from the region be requested to undertake a technical evaluation of the requirements for putting a public switched data network in place. This network would facilitate access to data held by

the regional systems and would support other activities requiring regional communication.

MASS COMMUNICATION

32. It was agreed that the Government Information Services and the Caribbean News Agency (CANA) should be the main agencies employed for the dissemination of information on the systems and for disseminating repackaged versions of the systems holdings.

POLICY PROPOSALS

- 33. The policy proposals for the establishment of a CARIBBEAN NETWORK OF REGIONAL INFORMATION SYSTEMS, as detailed in the working document were accepted by the meeting with modifications proposed in relation to the "Proposed Framework for the Co-ordination of Regional Information Systems". It was recommended that the policy monitoring committee be a "Consultative Committee", on which the following interests would be represented:
 - national co-ordinating bodies;
- regional oranizations responsible for the development of regional information systems;
 - national focal points of regional information systems;
 - the universities;

and the specialist areas of:

- telecommunications;
- mass communications;
- statistics;
- computerization.

The meeting recommended that the ECLAC/CDCC and CARICOM secretariats should take the necessary steps to ensure the formation of the Committee based on the above representation.

- 34. One task of this committee would relate to the process of establishment of regional information systems ensuring in particular that appropriate activities and/or criteria are defined and applied to the establishment of each system. These were expected to cover the following:
- (a) that the issues of sustainability, human and physical resource requirements, impact of the national financial resources on the development of the system would be addressed by all governments of participating countries in the establishment of a system;
- (b) that the requirement for a centre with a relevant and adequate information base to be chosen as a regional co-ordinating focal point and for the parent institution to be able to support the role of focal point, be met;
- (c) that proposals for the establishment of new information systems be examined in the context of already established systems and planned programmes with a view to optimizing the use of resources;
- (d) that the information systems are indeed responsive to the needs and priorities of the countries;
- (e) that there is a clear definition of the target user groups, which will imply acceptance of the subject scope, and inputs and services of the systems;
- (f) that compatibility of the systems is maintained as well as standards and methodologies; and that where there is exception from compatibility, that there be a clear rationale for this;
- (g) that the integrity of regional standards be treated as a first priority and that assistnace be provided where necessary to the national systems to support the implementation of these standards;
- (h) that as far as possible, a pilot project be used to test the viability of each system, and to provide a basis for determining users needs, services and outputs, and requirements for human, technological and financial resources required;

- (i) that every effort be made to optimize the resources directed toward training, ensuring the introduction of information technologies and methodologies so that the largest audience can be reached by the short-term training available in the region.
- 35. The Committee would also be expected to ensure that evaluation of the systems for effectiveness be systematically carried out in the light of the continuing development of the new systems and in the light of the changing priorities of the users.
- 36. The Committee or a sub-group of the Committee would participate in the negotiation process for external funding to support the establishment of regional systems or the continued operation of already established systems.
- 37. The Committee would also be expected to co-ordinate the overall management of the regional systems to ensure that the:
 - objectives of the systems continue to be met;
 - human, financial and physical resources be put to maximum use;
 - areas of wasteful duplication be removed;
- co-ordination of activities of external agencies involved in the establishment of regional information systems is constantly promoted and that information systems being established are done in the context of an agreed framework.
- 38. The Committee is expected to employ the existing information technologies for consultations. The possibility of using the University of the West Indies Distance Teaching Experiment (UWIDITE) for holding meetings of the Consultative Committee is to be investigated.
- 39. In conclusion, the meeting agreed that the final version of the working document and the recommendations of the meeting be presented to

the member states and be submitted to the next meetings of the CARICOM Heads of Government and of the Caribbean Development and Co-operation Committee for ratification.

Annex I

A REGIONAL INFORMATION SYSTEM STRATEGY FOR THE CARIBBEAN

TO THE YEAR 2000

Executive summary

This document outlines the proposals for a regional information system strategy which have resulted from the exercise jointly undertaken by the Caribbean Community (CARICOM) Secretariat and the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) Subregional Headquarters for the Caribbean, with financial support from the International Development Research Centre (IDRC) of Canada.

In an effort to identify the relevant issues which impact on the regional information systems and to determine an acceptable strategy, the consultant examined the factors influencing the development of the regional information systems, the resources available in the region and the national policies and plans which are to be implemented in the next decade and has therefore made recommendations on the development of the systems, as well as their products and services.

While undertaking а mission to the UNECLAC Subregional Headquarters for the Caribbean, the CARICOM Secretariat, Trinidad and Tobago, Barbados, Saint Lucia, the Dominican Republic, Jamaica and to IDRC, Canada, the consultant discussed issues outlined in the Background paper relating to the development of a regional information policy with officials responsible for the development of national information policies, national information systems and regional information systems and programmes.

The draft report of the consultant was reviewed by a technical meeting of the system managers and other specialists and the modifications proposed by the meeting have been included in this final document.

CHAPTER 1

The regional information systems

The regional information systems under discussion have been established by the governments of the region to provide access to data relating or relevant to the member states and to provide this information as an input to the regional development process.

CHAPTER 2

The geographical area

The regional groupings included in this study include the Caribbean Development and Co-operation (CDCC), the Caribbean Community (CARICOM), the Caribbean Development Bank (CDB) and the Organisation of Eastern Caribbean States (OECS). As the membership of these groupings overlaps, it seemed appropriate to examine the policy issues in relation to the English-speaking Caribbean, Cuba, Haiti, the Dominican Republic, Suriname, the Netherlands Antilles and Aruba.

CHAPTER 3

Priority sectors

Agriculture, industry, energy, trade, tourism, socio-economic planning, public health and preventive medecine, education, disaster preparedness and the environment, were identified by member states as priority development areas and regional information systems exist or have been proposed for these priority sectors, except tourism and the environment. The technical meeting requested that culture be also included as an area for the development of a regional information system.

CHAPTER 4

Information needs and services required

It is proposed that the systems will serve all members of the development community: policy-makers, planners, administrators and managers, technical personnel and researchers in the service of the governments of the member states and will also extend their services to other members of the community - the farmers, entrepreneurs and the exporters - the potential innovators in the public and private sector.

CHAPTER 5

Regional information systems and programmes

Regional and subregional systems exist in the areas of agriculture, disaster preparedness, trade, socio-economic planning, industry, energy and banking and finance, and include or expect to include, bibliographic data on documents produced in or about the region, textual data on regional specialists and specialist institutions and research in progress, and quantitative data on regional production. One system has been repackaging specialist information for distribution to small-scale industrialists - the Caribbean Technological Consultancy Service (CTCS) and another system - the Association for Caribbean Transformation Agricultural Information Service (ACT-AIS) has also been using English language and creole radio programmes to disseminate information to the agricultural communities.

CHAPTER 6

The mandates of relevant-organizations

The CARICOM Secretariat and the UNECLAC Subregional Headquarters for the Caribbean have been implementing information systems in relation to their areas of specialization and they are expected to work closely in the implementation of this strategy and in the future on the co-ordination of the policies relating to regional information systems.

CHAPTER 7

Activities of regional organizations in the development of regional information systems

Several regional organizations including the: UNECLAC Subregional Headquarters for the Caribbean, CARICOM Secretariat, Caribbean Development Bank, University of the West Indies, OECS Secretariat, now serve or are expected to serve as the regional and subregional focal points for regional information systems which fall within their areas of specialization.

CHAPTER 8

Activities of extraregional and international organizations in the development of regional information systems

Extraregional and international organizations have provided technical and financial assistance in the development of the regional

information systems. They include the main donor agency, the International Development Research Centre (IDRC), as well as Unesco, the Commonwealth Secretariat, the Organisation of American States (OAS), the United Nations International Trade Centre (UNITC) and the World Intellectual Property Organization (WIPO).

CHAPTER 9

Resources

An examination of the human, technological, information and financial resources now available for the maintenance of the regional information systems demonstrated a significant improvement over the past decade. There is need, however, for continued national and external support for infrastructural development if the systems are to achieve their stated objectives.

CHAPTER 10

National policies

All member states have discussed the development of national policies and the majority have prepared formal statements on the objectives of developing a national information system for the libraries in the country. These policies do not however cover all areas of the information sector. Details on policies governing participation in regional information systems which had to be gleaned from current activities indicate that participation in the regional systems is in keeping with the policies of the member states.

CHAPTER 11

Mechanisms which facilitate the national and regional information flow

Libraries and documentation centres, statistical services, referral centres, postal services, data and telecommunications facilities and mass communications media, were considered to be the main means of facilitating the regional and national information flow. Lack of intra-regional data communication facilities is a barrier to the flow of information and it is recommended that the University of the West Indies Distance Teaching Experiment (UWIDITE) and other existing regional facilities be investigated as the basis of a publicly available regional data network.

CHAPTER 12

Proposals

The proposals detailed in chapters 12 and 13 identify the systems which should be linked to prevent unnecessary duplication and to ensure that the data collected can be provided to the users. Proposals are also made for establishing systems for health, the environment and tourism, and for standardization and compatibility between all the systems.

Further development of the <u>human resources</u> to manage the regional and related national systems is also proposed, both in terms of new training and upgrading of skills to match the requirements of using the new technology and providing a more vibrant information service.

CHAPTER 13

It is proposed that the <u>linkages of the systems with the national</u> and regional mass media will provide for a wider dissemination of information to the development community.

The establishment of a <u>Caribbean Network of Regional Information</u> Systems is proposed.

In order that these proposals could be discussed and adopted by all involved in their implementation, they were discussed initially at a technical meeting of system managers and other specialists and subsequently submitted to all the member states and to the next meetings of the Caribbean Development and Co-operation Committee, the CARICOM Ministers responsible for national information systems and the CARICOM Heads of Government conference.

Policy monitoring

It is recommended that this be the responsibility of the Network Consultative Committee which would be composed, <u>inter alia</u>, of the managers of regional systems and which would, through regular consultation, determine policies relating to existing and proposed systems.

RECOMMENDATIONS FOR IMPLEMENTATION OF THE STRATEGY

Network management

Regional information systems for providing access to the information produced in or about the region, should be established or developed in the priority areas of:

AGRICULTURE
BANKING AND FINANCE
DISASTER PREPAREDNESS
EDUCATION
ENERGY
THE ENVIRONMENT
HEALTH
INDUSTRY
LAW
SOCIO-ECONOMIC PLANNING
TRADE
TOURISM
UNEMPLOYMENT

The rationalization of the systems and the linkages proposed in the report are to be used as a guide to eliminate overlap and for determining linkages of related systems.

As the implementation of the policies will require co-ordination of the activities of these systems, it is recommended that a Caribbean Network of Regional Information Systems be established. The Network should be composed of the existing regional information systems and others as developed, and the Consultative Committee would determine current and on-going policies, the boundaries between systems and the linkages of related existing and proposed systems.

There should be regular consultation between the members of the committee, and the University of the West Indies Distance Teaching Experiment (UWIDITE) should be investigated as a means of communication between the members.

The fact that the regional systems are multi-disciplinary requires that the strategy be ratified at the highest governmental level. It is therefore recommended that the strategy be presented to the next meetings of the Heads of Government of the Caribbean Community and of the Caribbean Development and Co-operation Committee.

The CARICOM Secretariat and the UNECLAC Subregional Headquarters for the Caribbean should be responsible for presenting proposed changes in the strategy to the future meetings of the Heads of Government and of the Caribbean Development and Co-operation Committee.

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The network should be recognized as the regional link with extraregional and international agencies. This would encourage the development of the regional systems within a systematically developed strategy.

SYSTEM DESIGN

There should be an overall design for each of the systems proposed. This design should include consultation with member states on the basic structure of the system, their participation and project proposals for extraregional funding.

INPUT

As the systems are based on locally produced and locally relevant material, it is also recommended that the member states and regional organizations ensure that their policies of classification and declassification facilitate access to unpublished documents and other data on the results of regional experience and research.

PROCESSING

The techniques employed for processing the systems' data should be selected in relation to current regional practices and facilities and these should be periodically reviewed in order to take advantage of changing technologies. Common methodologies and input formats should also be employed for the design and structure of the systems' databases.

Hardware

As the distribution of copies of regional databases to member states will require compatibility of equipment, it is recommended that the equipment used in the microcomputer-based systems be IBM-compatible machines for which servicing is available locally.

Software

As the mini-micro CDS/ISIS software package produced by Unesco is the most appropriate package presently available, it is recommended that this be the standard software for bibliographic databases on microcomputer-based systems. As UNECLAC has been designated by Unesco as the regional distribution centre, it should also be requested to continue training staff of the national and regional centres and to investigate the possibility of data transfer between MINISIS, CDS/ISIS

and OCLC, which should facilitate the participation of the university libraries in the regional systems.

DISSEMINATION OF INFORMATION

Information on the systems

Member states should be made aware of the systems, their structure, services and local points of access to the systems' resources. The public and private national and regional media should be used to promote the systems. The newsletters of the regional organizations - CARICOM Perspectives, CDCC Focus and CARINET should be employed to publicize the systems and their services wherever possible.

Information on the regional information strategy

The strategy as finally confirmed by the member states should be as widely circulated as possible within the region as well as to extraregional and international organizations involved in the development of the regional information systems.

Information held by the systems

Users and potential users need to be aware of the information held by the systems and it is therefore recommended that updated copies of the regional databases should be available to the national focal points. Printed output should be distributed to provide back-ups for the computerized systems.

Repackaging of information

Significant pieces of information held by the systems should be summarized, analyzed, reviewed and disseminated through the mass media.

Access to external databases

Relevant information produced outside of the region should be made available to users of the region through relevant systems when the regional databases have been established.

Data communication

It is recommended that a regional data network be established to facilitate communication and to reduce travel costs between the national and regional focal points of the systems. It is recommended that the feasibility of using UWIDITE and other regional facilities as the basis of this network be further investigated.

National policies

The development of national information policies for the information sector will facilitate national development and will clarify the relationships with the regional systems and programmes. There should be regular communication between the national focal points and the regional centres to ensure the implementation of the national policies.

Human resources

Programmes for the development of information professionals should include training in areas required by the systems. This should include long and short-term training in the areas of systems analysis, computer literacy and the repackaging of information, the languages of the member states and other subject specializations.

Financial resources

Information should be designated a priority area for national budgetary funding and for external technical and financial assistance. Regional agencies should provide assistance at the national level within the framework of the regional system strategy.

Future developments

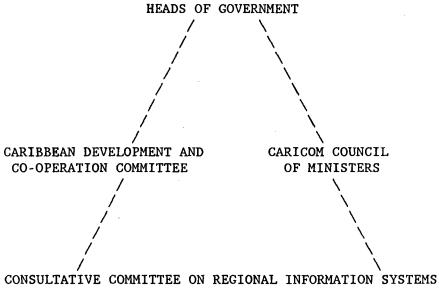
The above proposals have sought to rationalize the development of the regional information systems with particular emphasis on the aspects relative to the responsiveness of the systems to their constituencies. The mechanisms recommended for implementing these proposals have involved:

- initial review by a meeting of the systems' managers and other technical experts;
 - circulation of the proposals to all member states;

submission to meetings of the:

- (a) Caribbean Development and Co-operation Committee;
- (b) Heads of Government Conference of the Caribbean Community.

The acceptance by the above groupings of ministers is expected to provide the mandate for implementation of the strategy and therefore ensure its availability as the framework governing the regional information systems to the year 2000.



THE COUNTERING ON MICHAEL IN CHARLETON DICE.

advising:

THE CARIBBEAN NETWORK OF INFORMATION SYSTEMS

in the area of:

AGRICULTURE
DISASTER PREPAREDNESS
INDUSTRY
TRADE
ENERGY
BANKING AND FINANCE
SOCIO-ECONOMIC PLANNING

AND OTHER SYSTEMS AS DEVELOPED

A PROPOSED FRAMEWORK FOR THE

DEVELOPMENT OF THE REGIONAL INFORMATION SYSTEM STRATEGY

Annex II

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