GUIDELINES FOR CONCERTED ACTION BETWEEN AGENCIES
OPERATING INFORMATION PROGRAMMES FOR DEVELOPMENT
IN LATIN AMERICA AND THE CARIBBEAN

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CONTENTS

INTRODUCTION .......................................................... 1

A. ALTERNATIVES FOR CO-OPERATION AMONG INFORMATION SYSTEMS:
   THE CONCEPTUAL FRAMEWORK ......................................... 3
   1. Components of an information system .............................. 3
   2. "Areas" and "Machinery" for co-operation ............................ 4
      (a) Co-operation between information service infrastructures .. 4
      (b) Co-operation in technical support activities in the field of information ........................................ 5
      (c) Co-operation in the co-ordination of information systems .................................................. 8
   3. "Styles" of co-operation .............................................. 9
   4. "Fields" of co-operation ............................................. 10
      (a) Problems of co-operation between systems of an information sector ................................................. 10
      (b) Problems relating to co-operation among the systems of various information sectors ....................... 15
      (c) Problems relating to co-operation among information systems and other specialized institutions in the field of information .................................................. 17

B. IDENTIFICATION OF POSSIBLE INTER-AGENCY ACTIONS IN THE FIELD
   OF INFORMATION FOR DEVELOPMENT ................................... 18
   1. A number of ideas concerning Inter-Agency Co-operation in the Field of Information ............................. 18
      (a) Criteria for concerted inter-agency action ......................... 19
      (b) Provisional Bank of Ideas relating to Inter-Agency Co-operation ................................................. 19
INTRODUCTION

This document proposes a conceptual framework for inter-agency co-operation in the field of information and applies this framework to the situation of CLADES as Regional Centre and to the preparation of a preliminary list of ideas for joint projects which may be of interest to agencies.

Any effort towards inter-agency co-operation, however, fits into a broader context: that of concerted regional action in the field of information. In addition, in inter-agency co-operation we must distinguish two very different phases: "formulation" of co-operation plans and "implementation" of these plans.

The importance of these concepts and their usefulness in identifying the specific problem areas to be dealt with in the document have prompted us to devote a few lines of this introduction to discussing them.

(a) Concerted regional action

Underlying the idea of concerted regional action in the field of information is the application of the knowledge and techniques of the discipline of Planning.

Planning gives us the scientific instruments to prepare, facilitate and rationalize decisions related to creating, modifying or developing a system, in this case of information, and may be considered as a continuing rational process aimed at guiding a system from a present situation to a future desired situation (ILPES, 1977).

This process is expressed in two phases: (i) the plan formulation phase, which is the overall synthesis of the actions foreseen as being required for its execution, and (ii) the plan execution phase.

Plan formulation includes the stages of: (1) diagnosis, which attempts to state precisely the existing situation of the system, the causes of this situation and the trends towards change; (2) determination of objectives and goals, which basically express the desired future situation; (3) strategy, which is a series of principles and basic guidelines whose adoption may guide the selection and later application of specific instrumental machinery and, finally, (4) specification of policies for analysing the central purpose which has been identified for the system, in more specific terms (i.e., information services policy, technical assistance policy, etc.).

(b) Concerted regional information action

The application of the previous concept to the field of information means that concerted action would be a rational effort to change the present situation - in which national, subregional, regional and international information systems coexist without any co-ordination - into a situation in which there is a better co-ordination of efforts and more intense exchange and flow of information among the systems and between them and the communities of users.
(c) Concerted "inter-agency" action as a part of concerted regional action

However, within this very broad field of action, it must be pointed out that the joint efforts of intergovernmental agencies are only one part of concerted regional action. Actually, these agencies are in some ways the "super-structure" of all national information activities.

Of course, any change in the "super-structure" will in the long run have an impact on national infrastructures, but this change will most likely not have a direct and immediate effect on the information units and on the national information co-ordination bodies.

(d) The components of concerted inter-agency action

As was pointed out, these components are formulation and execution. This document will concentrate on the analysis of a useful framework for carrying out joint inter-agency action, without going into great detail on the elaboration of all the background information required for the prior formulation of a regional information plan.

Information plan formulation is a very broad subject and has seldom been attempted in the region. Indeed, there have been very few experiments in which the techniques and methods of planning have been rigorously applied and the sequence of actions has been carried out which, starting from a diagnostic study of the situation, can lead to the identification of concrete and coherent action with corresponding objectives and strategies.

This situation is especially critical in the field of inter-agency action, where the rare co-operative actions which have been carried out arose from conjunctural situations or circumstances, without full consideration of final objectives. In particular, we do not have a complete diagnostic study of the present situation as regards inter-agency action (UNESCO/PGI, 1979) (Saracevic et al., 1979) (Arias, 1978); it is not clear what reference model and objectives are being pursued, and there are no strategic guidelines to map out concrete decisions, etc.

CLADES believes it is very important to initiate this work, which will enable the series of actions undertaken by agencies to be more rational and coherent, since a classification of objectives, policies and strategies will enable a better individual and joint effort to be made. Such a plan, rather than being a rigid, authoritarian set of very detailed measures, will serve as a reference framework for each of the regional information systems.

The extent and complexity of this task, however, make it necessary to begin some parallel joint actions. In the Centre's opinion, it would be an error to wait for the complete realization of a plan before attempting some rapprochement and co-ordination.

Thus, the position of this document will be pragmatic and open to accepting the challenges presented today by inter-agency co-operation.
A. ALTERNATIVES FOR CO-OPERATION AMONG INFORMATION SYSTEMS: 
THE CONCEPTUAL FRAMEWORK

1. Components of an information system

Information systems have been the object of different treatments and approaches on the part of various disciplines. In this section, without claiming to present a rigorous statement of the subject, a very simple framework is proposed which describes the essential nature of information systems and their components with the sole objective of creating a useful tool for conducting an orderly discussion.

Information systems are rather complex organizations of specialized human resources, equipment and financing whose mission is to obtain and transform information for the purpose of making it accessible to a defined group of users. Normally there are three minimum requirements for any information system:

(i) it must be effective, that is, it must fully satisfy the information needs of the users, bringing them permanent information in a convenient form, presented in an organized and intelligible way;

(ii) it must be efficient, that is, its support to its users must be achieved through a rational use of resources (technical efficiency) at minimum cost (economic efficiency);

(iii) it must be viable, that is, it must be capable of maintaining durability and stability through time and must have the machinery to adapt to changing conditions in its external environment, mainly due to new information needs and changes in available resources.

These requirements in turn mean that information systems must consider at least the following components internally:

(i) an information services infrastructure, which is the core of the system and is formed by those units and specialized centres capable of carrying out the intrinsic operations of the system: acquisition, processing and dissemination of information.

(ii) a technical support component responsible for providing the infrastructure with knowledge and expertise to ensure continued perfection and adaptation of the information system, and

(iii) a co-ordination component whose job is to supervise the operation of the whole system and each of its parts in order to ensure effectiveness and efficiency.

Figure 1 is a diagram of the internal components and external environment of an information system. In the external environment, only the system of information use is shown, which consists of institutions and specialists in development responsible for formulating plans and policies, making decisions and carrying out actions in pursuit of development. For the purpose of simplifying
the diagram, other systems of the external environment have been excluded, such as financing, training of information professionals and production of useful equipment for processing and disseminating information.

2. "Areas" and "Machinery" for co-operation

In this section, we will consider the co-operative relations which may be established between the components of any two information systems. The "areas" of co-operation are mainly defined by the three components mentioned above and by the items which make them up. The "machinery" is related to the practical form which co-operative ties between them may take.

The analysis presented in this section is very schematic and does not claim to be exhaustive.

(a) Co-operation between information service infrastructures

The information service infrastructure is made up of specialized units and centres which interface directly with the users of the system of information utilization. An information service infrastructure may have one or more entities in the following fields or areas of processing and dissemination of information:

(i) information units (documentation centres, reference centres, specialized libraries, clearing-houses, ...);

(ii) information networks (composed of an interconnected group of information units and co-ordinated by a central information unit), and,

(iii) peripheral centres which specialize in operations of processing and dissemination of information (data processing centres, reprography centres, translation centres, data transmission networks).

In turn, information systems may link together one or more of the areas mentioned through co-operation machinery such as:

(i) joint programmes which share human resources, equipment, information banks and financial resources;

(ii) "territorial" systems of division of labour in which the sources of information to be obtained and the communities of information to be reached are specifically defined in order to avoid duplications; and

(iii) systems of exchange of experience, publications and information on work in progress.
(b) Co-operation in technical support activities in the field of information

The technical support activities have been divided into 4 main lines of action: training, preparation of standards and standardized instruments, technical assistance and applied research in the field of information.

(i) Training: training includes all those activities carried out internally by the systems which are designed to improve the training of human resources already existing in the system, basically those located in the information services component, or those designed to train human resources which will be incorporated into the system. Another important dimension of this training is the training of the users of the system to improve their access to the use of existing information.

Training given internally by the systems does not have, nor should it have, an academic orientation designed to grant diplomas and degrees corresponding to higher education, but rather should be designed to complement the technical abilities and knowledge of persons already trained in very specific fields of information. These are normally three alternatives for carrying out the training:

- courses, workshops or seminars designed to transfer knowledge in an orderly way, promoting active participation and stimulating a critical attitude in the participants;
- in-service training, which refers to supervised, practical work carried out within a unit of the same system; and
- guided tours to provide general familiarization with the operation of the whole system or specific parts.

Co-operation machinery which may be used in this area may consist of, inter-alia:

- joint training programmes designed to offer various opportunities for learning (exchange of instructors, ...);
- co-ordinated preparation of teaching material (subcontracting, joint teams); and
- exchange of training and information material on the training activities.

(ii) Preparation of standards and standardized instruments: this activity is aimed at facilitating information exchange between systems. It carries out a critical study of the techniques presently in use in the systems and develops new standards and instruments for the standardized processing and dissemination of information.

The areas of standardization suitable for co-operation between systems are mainly defined by a study of:
- formats for organizing and recording bibliographical data: fields, sequence, number of characters;
- terminologies and classifications for coding data: key words, descriptors, thesauruses, classification schemes;
- information processing methods: indexing, abstracts, cataloguing;
- data processing systems: manual or automatic, computational software and hardware;
- information transmission systems: by hand, mail, telex, telephone.

Co-operation machinery which may be used in these areas includes:
- the joint preparation of standards and instruments to make the exchange of information compatible;
- the promotion of agreements to adopt standards or instruments already existing in one of the systems;
- exchange of manuals and information on activities carried out in this area.

(iii) Technical assistance: technical assistance is the series of activities designed to support the existing specialized technical capacity of information systems and to create new systems of information or modernize the existing ones. A word which neatly describes the second circumstance in which technical assistance takes place is "CHANGE". An unsatisfied need - or one which is being insufficiently satisfied - is perceived, and a change is sought in the present method of providing information services. To solve this problem the conventional steps are taken: defining the problem, working out solutions, choosing the most suitable ones in accordance with clearly established criteria, and then implementing the solution by putting into practice and supervising the initial operation of the newly conceived system.

Such technical assistance may be carried out with varying degrees of participation on the part of the recipient institution. In some cases, the assistance is completely delegated to the assisting body. In this case, a packaged system is normally delivered and the necessary tools for understanding its operation are not transferred to the recipient.

This means that this organization is unable to operate and maintain the system on its own and must again resort to the assisting body for future modernization or reproduction of the original system. The other alternative, on the contrary, provides for the joint participation of the assisting body and the recipient organization in all the conception and implementation steps of the information system, thus leading to a real and continuous transfer of know-how to the recipient and endowing it with a large amount of autonomy for future changes in the system.
Types of co-operation machinery which may be established between two information systems in the area of technical assistance areas follows:

- one system can give technical assistance to the other system for its improvement;
- they can carry out joint missions of technical assistance to third institutions;
- they can define fields of work in order to avoid duplication. This includes subject areas, phases of the process of system design and determination of the recipients of technical advice;
- methodologies can be worked out jointly for carrying out technical assistance missions;
- information can be exchanged on methodological aspects (joint evaluations, exchange of publications, exchange of information on activities in progress).

(iv) Applied research in information. As the name of this section indicates, it deals with the application of a scientific research methodology to problems of information. Normally the research components of information systems should not devote themselves to pure (academic) research aimed at the formulation and comparison of hypotheses and theories of information science. Their work should rather consist of the application or partial comparison of these relationships in field work carried out in the multiple institutional conditions of Latin America.

Moreover, we should understand the term "research" as a broad concept of activities related to the essential cognitive processes which should be carried out by the system in order to integrate itself more fully into reality. These activities would include:

- carrying out empirical investigations on concrete information problems, with the aim of measuring or describing phenomena;
- absorbing the theoretical knowledge produced by the international scientific community which specializes in information science and related disciplines.

In addition, this activity may be found within an information system in concentrated form (in a unit specifically established for these purposes) or in diffuse form (in the various components of the system). Thus, the training component may investigate, for example, the effectiveness of various teaching methods, or the information services component may study the degree of utilization of the products being offered to its users. In any case, the common theme of this research effort, whether centralized or spread among the various components of the information system, is the continued perfecting of a methodology and of research techniques which can be fruitful in the Latin American setting.
The co-operation machinery in this area includes the following:
- carrying out joint research on specific topics;
- holding meetings to evaluate progress in information science and related disciplines;
- jointly working out methodologies and research techniques;
- exchanging information;
- defining patterns of work distribution in subject areas, information problems and empirical realities to be investigated.

(c) Co-operation in the co-ordination of information systems

The co-ordination component is responsible for achieving harmonization of the total operation of the information system both internally and in respect of the external environment. We have called this co-ordination, rather than administration, management, leadership or regulation, so that it will be thought of as flexible machinery involving concerted activities, rather than a formal mechanism.

Co-ordination has three main components:

(i) The planning of the information system, which involves the preparation of a series of strategies, policies, policy instruments and programmes designed to make the system work coherently and rationally. This implies: (i) the need to imagine the final, ideal state to which the system should aspire and to specify it in accordance with a series of objectives and a reference model showing the components of the final system and their relationship, and (ii) a diagnostic study of the present reality of the information system, both internally and externally.

(ii) The "promotion" of the co-ordination of the information system, which is composed of all those actions necessary to implement the ideas conceived as regards the planning of the system. Such supervision should be guided by an up-to-date knowledge of the situation of the system and should be exercised through skilled persuasion and negotiation in order to encourage co-operation and appropriate contributions from the various internal components and areas outside the system.

(iii) "Evaluation" of the co-ordination of the information system, which refers to the study of the successes and failures of the measures used, in order to make the necessary corrections to the courses of actions followed.

Co-operation in the area of co-ordination between two information systems may be secured through the following machinery:
- joint programmes designed to carry out one or more of the aspects of co-ordination (especially joint evaluation of the systems);
- joint development of working methodologies (e.g., study of diagnoses, techniques for identifying objectives, ...);
- agreements for the exchange of working methodologies;
- transfer of experience and exchange of information.

3. "Styles" of co-operation

A "style" of co-operation is the institutional form taken by the agreements between two bodies which possess information systems. "Styles" of co-operation may be grouped into bilateral and multilateral arrangements.

Bilateral arrangements are institutional contacts between two information systems which give rise to joint actions. It is usually quite easy to achieve progress through such agreements, since they tend to arise in circumstances in which there is either a strong motivation to collaborate between the parties or they clearly perceive a complementarity of actions whose co-ordination would be largely beneficial to both.

This type of arrangement, however, has two limitations: (i) its partial nature, that is, it excludes other systems which it might be desirable to include, and (ii) its conjunctural and sporadic nature, and the fact that it is not always clearly fitted into a suitable time framework. We are not saying that these arrangements should be eliminated, however, on the contrary, they could even be encouraged when machinery is being considered which permits their incorporation in a broader and longer-term view.

Multilateral arrangements are adopted with the aim of linking a larger number of information systems within a broader framework.

We can distinguish various types of multilateral arrangements which may result from the combination of two characteristic features, namely:

(i) their degree of institutional formality, depending on the nature of the commitment of the participants and the more or less permanent character of the multilateral arrangement.

Here we may distinguish a broad range, from permanent regional secretariats for information co-operation to more informal arrangements such as a consultative panel of experts who discuss specific problems of information activities in a personal capacity, or a consultation meeting such as this one;

(ii) their degree of intervention in the information systems composing them, from direct execution of activities and reassignment of the funds of the various systems to a mere passive distribution of information in the hope that it will stimulate later agreements between systems.
4. "Fields" of co-operation

In this section we will examine the fields of action in which the various information systems operate, the relationship between these systems, and the problems resulting from the "field" dimension in co-operation between information systems. To this end we will follow a sequence of analyses through schemes which are increasingly close to actual conditions.

(a) Problems of co-operation between systems of an information sector

In defining a specific subject area for information systems and surveying it in terms of its content and limits, we may classify information systems as belonging to four ambits which, in order of their geographic scope, are:

(i) national information systems;

(ii) subregional information systems;

(iii) regional information systems;

(iv) world information systems.

National information systems are divided into two levels: (i) internal information systems of individual national institutions, and (ii) information systems of national co-ordination institutions.

Internal systems of individual national institutions belonging to a given sector, for example a private enterprise or a university faculty, have, in principle, all three components of information systems: information services, support machinery and co-ordination machinery. However, the degree of development of these components is almost always very uneven. Thus, there is usually no internal support machinery, nor any clearly defined co-ordination machinery. Usually there exists only an internal infrastructure of information services composed of unco-ordinated units such as files, libraries and publication distribution units.

Information systems of national co-ordination institutions in a sector vary according to whether the institution serves a substantive or operative co-ordinating role, or whether it is responsible for the co-ordination of information activities in the sector. In the first case an example would be a sectoral development bank and, in the second case, a ministry which acts as the network head of a national information system corresponding to the sector.

Subregional information systems have their raison d'être in the existence of a group of countries with similar cultural, historical and geographical ties. The fact that these countries are closer together and smaller in number than in the case of a region makes them, in principle, a more viable proposition than regional systems.
Subregional information systems, like national ones, may be divided into two groups: (i) information systems of individual subregional institutions and (ii) information systems of subregional information co-ordination institutions. Included in the first group are political integration institutions and other systems of economic, social and cultural co-operation in subregions such as Central America, the Andean countries and those of the River Plate Basin in South America, and the Caribbean subregion.

Regional information systems exist for the same reason that institutions such as CEPAL, SELA, etc. were established, that is, to co-ordinate and promote a position of the region as a whole towards the rest of the world. Regional information systems would be responsible for co-ordinating and integrating subregional information systems along with systems in countries which, for various reasons, have not found it possible to integrate into any subregional mechanism. Here too we may distinguish two types of information systems: (i) information systems of individual regional institutions and (ii) information systems of regional information co-ordination institutions.

Finally, continuing this aggregation process, it is easy to define world information systems, which have similar characteristics to information systems of the previous areas. Figure 3 shows the relationship between the information systems of one sector in the various areas. This diagram also suggests the presence of an ideal pattern of relationships in which a perfect pyramid is built and a smooth exchange of information takes place. This basically assumes that the systems are working in an absolutely compatible way, that a true exchange of information is established among them, and that all the institutions in each area have been connected to the corresponding information co-ordination institution. This last assumption is particularly vulnerable in the light of the experience of some sectoral networks.

We will now examine the main co-operation problems in an information sector between systems of various geographical areas. They will be illustrated through an analysis of the relationship between the more primary systems: the national institutions and the national information co-ordination institutions.

Thus, we can see in figure 4 a sectoral network in a given country which is co-ordinated by the information system to which the systems of national institutions (b) and (c) are connected. There is a national institution (d) and two national co-ordination institutions (e) and (f) which are not connected to the system (a).
Figure 1
COMPONENTS OF AN INFORMATION SYSTEM

Figure 2
AREAS OF CO-OPERATION BETWEEN INFORMATION SYSTEMS
Figure 3
AREAS OF CO-OPERATION IN THE INFORMATION SECTOR

Subregional World

Substantive Co-ordination Institute

Information Co-ordination Institute

Regional

Substantive Co-ordination Institute

Information Co-ordination Institute

Subregional

Substantive Co-ordination Institute

Substantive Co-ordination Institute

Substantive Co-ordination Institute

Information Co-ordination Institute

Subregion C

Information Co-ordination Institute

Subregion D

National

Substantive Co-ordination Institute

Substantive Co-ordination Institute

Institution 1 Institution 2
Country 1

Substantive Co-ordination Institute

Information Co-ordination Institute

Institution I

Institution I

Country I

Institution II

Country II
Figure 4

National (f)
Co-ordination institutions

(a)

(b)

(c)

(d)

(e)

National implementation Institutions
(1) Problems resulting from non-participation on the part of individual institutional information systems (d) in a national system (a)

This situation has the following consequences:

(i) a lack of comprehensive information in system (a), because it does not receive the information existing in system (d);

(ii) duplication of effort on the part of (d), which, owing to its isolation, must obtain independently the information that (b), (c) and (a) already possess;

(2) Problems resulting from non-participation on the part of information systems of national co-ordinating institutions (e) in a national system (a)

This situation gives rise to:

(i) a lack of comprehensive information in system (a), it does not receive information system existing in (e);

(ii) duplication of effort on the part of (e), which, owing to its isolation, must obtain independently the information that (b), (c) and (e) already possess.

(3) Problems resulting from the establishment of information systems parallel to the national system (a) in national co-ordination institutions (f)

This situation results in:

(i) a lack of comprehensive information in system (a), because that system does not have the information existing in (f);

(ii) duplication of information services and co-ordination and support efforts on the part of (f) in relation to (a);

(iii) dispersal of the resources of (a) and (b), since two parallel systems have to be operated;

(iv) confusion on the part of users as to where information is to be found.

The classification of problems just described is also applicable to areas at a more comprehensive level. For example, the same type of difficulties may arise between subregional and national systems and regional and international systems.

(b) Problems relating to co-operation among the systems of various information sectors

If it were possible to delineate with exactitude the subject areas of information systems belonging to the various sectors, it would be conceivable that there could be perfect coexistence among complementary systems, each system having a structure similar to that in figure 3. However, the moment the situation is considered in terms of scientific disciplines or in terms of
development problems there will inevitably be subject areas that fall under various disciplines and problem areas that virtually automatically result in overlapping between information systems. It is, for example, clear that in the field of information for development there is a need for interaction among the so-called sectoral systems, such as Agriculture, Industry and Health, with systems that are established on the basis of "Development Dimensions", such as the Environment, Human Settlements, or on the basis of "Development Action", such as Planning, Integration, and Horizontal Co-operation.

In order to visualize the problems that can arise among information systems belonging to various sectors, an outline of the situation of two national information systems in the energy and human settlements sectors will be considered.

In figure 5 it may be noted that there are three national institutions whose information systems belong to both national systems. Two situations may arise here: (i) the systems operate according to compatible rules, in which case the institutions participating in both systems must process their information and send a copy of that information to the two national systems, thus duplicating the cost of handling the information in two parallel files; (ii) the systems are not compatible, because of the method of entering the data is different, the terminologies utilized for analysis of content are different, or there are differences in the processing of software.
In this case there will be duplication of work in institutional information systems participating in both national systems, since they will have to process the same information twice according to different criteria and standards. Moreover, it will not be possible for national systems to share or exchange information in their master files.

There could also be duplication with regard to the training, technical assistance and research services provided by the two national systems.

Naturally, the greater the overlap in the subject matter and institutions of two national information systems, the greater the advantages resulting from:

(i) delineating the territorial limits of the two systems in terms of types of information to be processed and the body of users to be served;

(ii) standardizing data processing procedures;

(iii) sharing resources and exchanging experience in the field of training, technical assistance and research.

Problems relating to co-operation among information systems and other specialized institutions in the field of information

The integration of information systems within one and the same sector in the various areas referred to and the integration of systems into various information sectors are urgent and immediate challenges to inter-agency co-operation. However, there is a third area of co-operation that is also important: co-operation with institutions that, being on the periphery of the systems, specialize in questions relevant to information activities.

At the national, subregional, regional and international levels there are institutions specializing in training (schools of librarianship, associations of schools of librarianship), standardization (FID, ISO, etc.), research (schools of librarianship, FID, etc.) and specific data processing fields, such as electronic data processing centres, reprography centres and translation centres. To these institutions should be added others whose field of action takes the form of financing information systems (development assistance agencies, such as IDRC, (Canada), CIDA (Canada), DSE (Germany)), and intergovernmental agencies (such as OAS and UNESCO) and professional exchanges (library and librarian's associations, federation of library associations).

Co-operation on the part of such institutions, which are normally relevant to many information sectors, with national, regional and international information systems is necessary so that their action should be aimed in the same direction: integrating systems and overcoming obstacles to the exchange and utilization of information.

In conclusion, it may be maintained that this chapter has provided the components for any form of action, whether it be a project, programme or an agreement, undertaken jointly by intergovernmental agencies with information
programmes in Latin America and the Caribbean. Taken together, these components make up the "gamut" of alternatives in inter-agency co-operation.

Each inter-agency co-operation project represents a particular combination of "areas", "types" and "spheres". (See tables at end). Agencies will have to select from a range of possible related projects that have been formulated those projects that seem most appropriate and most urgent in accordance with jointly agreed criteria.

Lastly, it should be stressed that the outline presented here has been used in consolidating a number of possible projects in the Provisional Bank of Ideas relating to Inter-agency Co-operation dealt with in the following chapter.

B. IDENTIFICATION OF POSSIBLE INTER-AGENCY ACTIONS IN THE FIELD OF INFORMATION FOR DEVELOPMENT

1. A number of ideas concerning Inter-Agency Co-operation in the Field of Information

In the view of CLADES, it is possible to co-ordinate inter-agency co-operation and establish inter-agency co-operation links through two simultaneous, and not mutually exclusive, methods. The first is an "institutionalist" method aimed at establishing institutions and formal co-ordination machinery with relatively ambitious areas of responsibility. It is considered that consolidation of such entities is necessary, although it should be borne in mind that there is a danger of: (i) adding further bureaucratic authorities that may at some point become an obstacle rather than a help; and (ii) having to wait too long for tangible results from their action.

The second method, which might be termed the "project" method, consists in gradually weaving a fabric of inter-agency relations through specific initiatives. The effectiveness of this approach will be all the greater to the extent that there is a coherent framework of general goals for the region in the field of information. Naturally, if there is no such framework, there will be a danger of fragmenting action and creating conflicts and tensions running counter to the integration of a regional information system.

However, it is considered that the broad outline of such a framework already exists explicitly or implicitly and that it is feasible gradually to make it more precise and coherent through joint inter-agency action.

In this section provisional proposals are put forward with respect to a number of general guiding criteria that could be introduced within such a framework, as well as a number of suggestions concerning specific projects that could be undertaken in the short and medium term.
(a) Criteria for concerted inter-agency action

Concerted inter-agency action calls for a minimum consensus on the nature of the problems that are to be solved as a whole. This section takes up a number of relevant topics which, in the Centre's view, could serve as guidelines in developing these basic principles:

(i) Scientific and technological data only form part of information for development.

As has been demonstrated in a number of studies (CIID, 1976, and SAMPER, 1977), the information required for decision-making in development activities is complex and varied and covers virtually all types of information, of which the scientific and technological element is a part, and not necessarily the most relevant part. The proposals in question were also taken up at the Second Conference of UNISIST (UNESCO/PGI, 1979).

(ii) Information generated in the region is the property of the region.

Of the variety of resources that countries have at their disposal for implementing their economic and social development plans - natural and human resources, etc. - "information resources" are perhaps the least protected and those with regard to which there is the least awareness of their value and importance. The responsibility for controlling and exploiting the resources in question must be a priority for countries, and action on the part of intergovernmental agencies must therefore take this principle into account both in designing and in operating information systems (ECA/IDRC, 1979).

(iii) Information generated in the region must be exchanged among countries.

Horizontal co-operation is a principle that is widely regarded as being essential for remedying problems relating to economic and social underdevelopment. In this context, the exchange of information with respect to experiments conducted in individual countries is a key variable for the success of such co-operation (ECA/IDRC, 1979).

(b) Provisional Bank of Ideas relating to Inter-Agency Co-operation

This section contains a listing of possible "projects" in the area of inter-agency co-operation. The projects have been set forth in the form of very schematic "cards" organized according to area of co-operation. Naturally, this list is not exhaustive and the content of each project is not considered in detail. However, as work material for a meeting for the purpose of consultation among the various agencies it could be useful as material for analysis, reflection and concertation.
<table>
<thead>
<tr>
<th>Area: Information Services</th>
<th>1/ - Title of project:</th>
<th>Exchange of data bases produced by the information systems of intergovernmental agencies (machine readable files).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Co-operation machinery:</td>
<td>Exchange of information and know-how.</td>
</tr>
<tr>
<td></td>
<td>Type of co-operation:</td>
<td>Multilateral; bilateral agreements.</td>
</tr>
<tr>
<td></td>
<td>Area of co-operation:</td>
<td>Subregional, regional and international information systems specializing in various development areas.</td>
</tr>
<tr>
<td>2/ - Title of project:</td>
<td>Evaluation of the information systems of intergovernmental agencies.</td>
<td></td>
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<tr>
<td></td>
<td>Co-operation machinery:</td>
<td>Joint study mission.</td>
</tr>
<tr>
<td></td>
<td>Type of co-operation:</td>
<td>Multilateral; bilateral agreements.</td>
</tr>
<tr>
<td></td>
<td>Sphere of co-operation:</td>
<td>Subregional and regional information systems specializing in various development areas.</td>
</tr>
<tr>
<td>3/ - Title of project:</td>
<td>Rationalization of subscription to commercial information services of developed countries.</td>
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</tr>
<tr>
<td></td>
<td>Co-operation machinery:</td>
<td>Joint study mission.</td>
</tr>
<tr>
<td></td>
<td>Type of co-operation:</td>
<td>Multilateral.</td>
</tr>
<tr>
<td></td>
<td>Sphere of co-operation:</td>
<td>Subregional and regional information systems specialized in various development areas.</td>
</tr>
<tr>
<td>Area: Training</td>
<td>Title of project:</td>
<td>Co-operation machinery:</td>
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<td>----------------</td>
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<tr>
<td>4/</td>
<td>Evaluation of experience in training information specialists.</td>
<td>Technical seminar for officials responsible for the training components of the information systems of agencies.</td>
</tr>
<tr>
<td>Area: Standardization</td>
<td>7/ - Title of project:</td>
<td>Exchange and ongoing revision of terminology in the field of development.</td>
</tr>
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<tr>
<td></td>
<td>Co-operation machinery:</td>
<td>Technical seminars; exchange of information.</td>
</tr>
<tr>
<td></td>
<td>Type of co-operation:</td>
<td>Multilateral (permanent secretariat).</td>
</tr>
<tr>
<td></td>
<td>Sphere of co-operation:</td>
<td>Subregional, regional and international systems; FID/CLA.</td>
</tr>
<tr>
<td>Area: Technical Assistance</td>
<td>8/ - Title of project:</td>
<td>Identification of compatible data formats.</td>
</tr>
<tr>
<td></td>
<td>Co-operation machinery:</td>
<td>Joint study mission.</td>
</tr>
<tr>
<td></td>
<td>Type of co-operation:</td>
<td>Multilateral; bilateral agreements.</td>
</tr>
<tr>
<td></td>
<td>Sphere of co-operation:</td>
<td>Subregional, regional and international systems; FID/CLA.</td>
</tr>
<tr>
<td>Area: Technical Assistance</td>
<td>9/ - Title of project:</td>
<td>Preparation of an annotated guide on the configurations of the software/hardware currently in use in, or potentially available to, the region.</td>
</tr>
<tr>
<td></td>
<td>Co-operation machinery:</td>
<td>Joint study mission.</td>
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<tr>
<td></td>
<td>Type of co-operation:</td>
<td>Multilateral.</td>
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<tr>
<td></td>
<td>Sphere of co-operation:</td>
<td>Subregional, regional and international systems.</td>
</tr>
<tr>
<td></td>
<td>Title of project</td>
<td>Co-operation machinery</td>
</tr>
<tr>
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<td>---------------------------------------------------------------------------------</td>
<td>------------------------</td>
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<tr>
<td>10</td>
<td>Preparation of a guide for Latin American information experts (horizontal co-operation).</td>
<td>Joint study mission.</td>
</tr>
<tr>
<td>Area: Co-ordination of Information Systems</td>
<td>13/ - Title of project:</td>
<td>Identification of inter-governmental information systems in the region and rationalization of focal points.</td>
</tr>
<tr>
<td>- Co-operation machinery:</td>
<td>Joint study mission.</td>
<td></td>
</tr>
<tr>
<td>- Type of co-operation:</td>
<td>Multilateral.</td>
<td></td>
</tr>
<tr>
<td>- Sphere of co-operation:</td>
<td>Subregional and regional information systems.</td>
<td></td>
</tr>
</tbody>
</table>

| 14/ - Title of project: | Study on the current financing of information systems and alternative sources of financing. |
| - Co-operation machinery: | Joint study mission. |
| - Type of co-operation: | Multilateral. |
| - Sphere of co-operation: | Subregional, regional and international systems; financing agencies. |