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ABSTRACT An analysis of existing multinational audiovisual materials exchange organizations, including five nonproducing and three producing national systems and seven nonproducing and five producing international networks, provided the data for an analysis of problems associated with cooperative endeavors, some suggestions for appropriate institutional structures, and various strategies for implementing sharing arrangements. Four models were abstracted from the data. Model A organizations provide information through cataloging existing audiovisual materials. Its members obtain materials from different producers. Model B organizations stock and distribute materials which are purchased or produced by its members. Members of Model C determine their audiovisual materials policies collectively. Model D pursues the objective of pooling or common creation of production tools. The structures, implementation strategies, and problems confronted by exchange mechanisms are functions of their objectives. Problems can be overcome through clear specification of goals by the concerned countries' or agencies with the coordinating or financing organization. Implementation generalizations drawn from current experiences suggest that it is better to progressively amplify existing mechanisms as needs and desires for cooperation evolve rather than create a complex exchange mechanism all at once. Appendices to the report are contained in a companion volume. (KB)

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ED129296

CENTER OF STUDIES AND REALIZATIONS FOR PERMANENT EDUCATION

(CEREP France)

MULTINATIONAL EXCHANGE MECHANISMS OF EDUCATIONAL AUDIO-VISUAL MATERIALS

SITUATION AND SUGGESTIONS

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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P R E F A C E

This study is the result of a recommendation by the General Conference of UNESCO which, during its 17th session, expressed a desire to see a study made, in the light of supporting education from a distance, on "the possibility of establishing, on a regional or sub-regional basis, exchange cooperatives and development of educational programs and systems" (17C/5 para 173).

One must consider this analysis of "Multinational exchange mechanisms of educational audio-visual materials" as a preliminary study, which is tied, otherwise, into a much vaster program of activity including other studies on "open teaching" and the promotion of interinstitutional exchange networks as well as ones of informations and experimentations. As such, this document would like to encourage, by means of a presentation of existing realizations, the efforts of those responsible for educational or communication systems, who would like to examine how to pool together, at a multinational level, educational programs.

Carried out by the center of studies and realizations for permanent education (CEREP, France) this study does not pretend to give definite models. (These could not be defined, without starting from specific needs from each group considered). On the other hand, it should serve as a work document during a reunion of experts on the theme of exchange cooperatives which will be held in 1976 and 1977 in Eastern Europe, Asia, Africa, Latin America and in the Arab States.

UNESCO, Division of methods, materials and techniques and the CEREP would be happy to receive all suggestions permitting the amelioration and the development of the present version.

Paris, March 1976

Because audio-visual has taken on a progressively more important role in education, the production of educational audio-visual materials has greatly increased in numerous countries. The preoccupation with keeping abreast progress made in this field as well as minimizing the production of costly materials already manufactured by other countries created the desire for international exchanges : exchange of information, exchange or purchase/sale of materials, co-productions, etc. ? What problems will they present : copyrights, difference of the language, of the conception or of the educational system, quality of the materials, etc. ? and how to solve them ? What type of institution must be set up ? etc.). Setting up an exchange mechanism of educational audio-visual materials implies dealing with the ensemble of these problems and taking into account the many answers already provided by existing mechanism.

This is the goal of this study. It was carried out in three phases :

- First of all, the seminar, organized in Grenoble in September 74 by the CICT (International Council of Cinema and Television) on the "Technology of Education and on Higher Education in Europe" have permitted the definition of the general problematic of the study.

- During a second phase, an analysis of a certain number of systems, differing from one another by their structure (national or multinational, public or private, etc.), by their degree of intervention (information, exchanges, production) or by their field of operation (higher education, technical, medical, etc.). This phase, carried out by means of visits to the organisms, discussions with those responsible and/or the promoters of systems, documentary studies, has made it possible to elaborate a series of descriptive cards on the systems studied, to draw up a list of lessons which can be learned from them so as to make the setting up of an educational exchange mechanism of audio-visual materials easier and present a spectrum of those functions which such a mechanism could fill.

- finally, the synthesis of the ensemble was carried out so as to try to give "an inventory of the problems" and "a few suggestions of models" which could be operational.

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6 - List of initials

ACCT	Agency for Cultural and Technical Cooperation (European Council)
AICS	International Association of Scientific Cinema
AUPELF	Association of Universities partially or wholly in the French Language
BADADUQ	Data Bank with Direct Access of the University of Québec (Canada)
BETEA	Office of Technico-Economic Studies relative to Audio-Visual Teaching (France)
CET	Center of Educational Technology (Great Britain)
CICT	International Council of Cinema and Television
CIME	International Council of Educational Methods
DOPAED	Dokumentationsring Pädagogik (RFA)
EGT	Committee of General and Technical Education of the European Council
ERIC	Educational Resources Information Center (USA)
EUDisED	European Documentation and Information system for Education
FWU	Institut für Film und Bild im Wissenschaft und Unterricht (RFA)
IAVRS	International Audio-Visual Resource Service (UNESCO)
INRDP	National Institute for Pedagogic Research and Documentation (France)
NHK	Nippon Hoho Kyotai (Japan)
NOVU	Nordisk Voksen Undervisnings projekt
OFRATEME	French Office for Modern Educational Methods
OIRT	International Radio and Television Organisation (Eastern Europe)
OMKDK	Information Center of Technical Films (Hungary)

SFRS Scientific Research Film Service (France)

TRU Comittee Committee for Permanent Activity with
Educational Radio and Television (Sweden)

EUR European Union of Radio Broadcasters
(Western Europe)

Abbreviations

C D U Universal Documentary Classification

A V M Audio-Visual Material (s)

E M Exchange Mechanism (s)

E O Exchange Organism (s)

APPENDIXES

- 1 ERIC, USA
- 2 DOPAED, RFA
- 3 Institut für film und Bild in Wissenschaft und Unterricht,
Munich
- 4 BADADUQ, Québec
- 5 Didactics, toward a network of media "Libraries" (1)
- 6 Computer Programming Plan of the University of Québec
- 7 National Office for Technical Development (Hungary)
- 8 CET, Great Britain
- 9 OFRATEME, France
- 10 Eolienne Editions, France
- 11 EUDISED
- 12 AUPELF
- 13 CIME
- 14 EUR
- 15 NOVU
- 16 Essential National and international positions on copyrights
(European Council, november 1974)
- 17 Problems of medium transfers
- 18 Excerpt from the BETEA report
- 19 Questionnaire for the Data Bank (Eastern Europe)
- 20 List of points to be taken into account for the preparation and
putting to work of an information service on audio-visual ma-
terials

) Media "Library" : The french term of "Mediathèque" is here translated as media "library" but an explanation of this term is given on page 35 in Appendix 5.1.

1 - INTRODUCTION

1.1 Elements of Analysis

The analysis of existing "Exchange mechanisms" as well as the elaboration of proposals likely to lead to concrete models must take into account four series of elements.

1.1.1. Objectives

Concretely, the objectives of an "Exchange Mechanism" (E.M.) will or will not lead to a taking into account of the following phases (which will be further detailed in section 4).

Cataloguing of Educational Audio-Visual Materials (educational A.V.M.'s),

Choice and selection of educational A.V.M.'s,

Stocking of educational A.V.M.'s (this stocking could be "physical" : The Exchange Organism (E.O) acquires programs in several copies, or "legal" : the E.O. obtains the copyrights,

Transfer of mediums of educational A.V.M.'s and Adaptation (the E.O. could realize these transfers and adaptations or have them realized by an outside agency),

Production of educational A.V.M.'s,

Coordination of co-production realized by member states,

Diffusion of existing educational A.V.M.'s or those produced or brought about through the initiative of the E.O.

The taking into account or the exclusion of any of these phases will lead to as many different models.

Legal, technical, economic, psychological, linguistic, and pedagogical problems will accompany each one of these phases. We will try to draw up an inventory and point the solutions which were possible to find through existing organisations and, when it is possible, evaluate the relative cost of the solutions.

(1) in the rest of this study, we will use the following abbreviations

E.M. Exchange Mecanisms
 A.V.M. Audio-Visual Materials
 E.O. Exchange Organisms

1.1.2. Choice of the type of institution

Institutionally, an E.O. can take on different shapes (national organization with a regional inclination, intergovernmental organization, foundation - office).

Starting from the analysis of the organization, and in function of the objectives which it sets up, an E.O. may prefer one or another of these structures. We will try to integrate this dimension into the proposals of models.

1.1.3. Specificity of the Regions

The determination of the objectives, the choice of an institutional structure, the evaluation of costs, will vary with each region or even with each sub-region where an E.O. will be set up. The elaboration of one or several models adapted to such a region or sub-region, presumes a simulated study which we cannot take into account here. Nevertheless, it seems useful to try to point out what, in the different E.O. models, seems to us to be clearly a variable, relative to the region.

1.1.4. Specificity of the Public - Specificity of the media

Here also, the elaboration of models adapted to a given public (educated children or adolescents, university students, adults in industrial areas, rural people,...) or the degree of intervention (support for an existing educational system ; modification of an educational system,...), the choice of media (films, television, video tapes, multi-media,...) cannot be determined outside the framework of a specific study, but we will try to point out the variables.

1.2 Clarification of the Study Plan

The analysis of a certain number of national and international organizations (sect. 2) will help us bring to light most of the problems brought about by the realization of the phases described in section 1 and to study the solutions which have been found. So as not to weigh down this analysis, we will save for the appendix the documentation concerning the organisms when these become too bulky, keeping in this section only a concise presentation. An inventory of the problems (sect. 3) will permit a synthesis of that which will have been brought out in section 2, and a balancing of the problems and solutions in relation to a project. We will then describe a few possible models (sect. 4) while trying to point out the advantages and inconveniences, and the areas of application of each.

2 - ANALYSIS OF A FEW ORGANISMS

2.1 Choice and classification

It seemed useful to us not to limit the choice of organisms to be studied to just the multinational ones, but to also open it up to several national agencies as well. To be sure, these last will not teach us anything or very little about the problems of exchanges or co-production, but the manner by which some have solved problems of classification of non-written documents, of stocking, of diffusing and of production, is liable to bring us interesting examples. Another axis than this first method of classification (multinational/national organisms) will be used, allowing us to distinguish between those producing documents and those that do not.

Other axes as well could have been used : distribution or not ? promotion or not ? They will appear in the descriptions but the organisms which produce documents have, in general, a very different structure than those who do not produce - from which this choice - a third axis crossing the other two : Some of these organisms are "coherent" systems, imagined and created to fill a specific function, others are "punctual" systems, created or coming from a more limited goal or from an existing situation - the table summing up this situation is given on page 40.

2.2 National Organisms - non producing

2.2.1. Educational Resources Information Center (ERIC) USA

ERIC is a national network both governmental and commercial, a system both centralized and decentralized at the same time. Even though it doesn't concern the media, it is interesting to present it for its structure :

1. A network of centers of documentation of which each is specialized in a field of education (adult education, language studies etc...) ;
2. A central office for conception, fiscal control, coordination and evaluation of the system ;
3. A development service which serves the role of a go-between taking in charge one of the coordinating functions for the central office : It recieves bibliographical summaries, puts them on computer tapes, and sends them to the printing service of the government.

4. A reproduction service and a sales service for the documents ; (3 and 4 operate through a contract with a commercial firm) ;
5. And a commercial firm which edits and sells a bulletin.

A more detailed description is given in appendix 1 ; and we can see that the only functions of information concerning written documents implies a large organization and numerous centers of documentation.

2.2.2. Dokumentationring Pädagogik (DOPAED) West Germany

We find

in the West Germany an organism having a structure with a network similar to that of ERIC, with a few slight differences (see appendix 2) :

- . The elements of the network are institutions with various educational objectives, which cooperate on a voluntary basis in analysing "literary" material so as to assemble it and diffuse the necessary information toward the development of education.
The institutions divide up the job of gathering, of reducing to the essentials and of indexation. They have standards and rules compatible with those of DOPAED.
- . The instrument of coordination, whose members are selected every four years, remains the Pedagogics Center of Berlin, whose influence has been fundamental in the elaboration of the "Pedagogic Bibliography", (with the thesaurus in only the German language) as well as other bibliographies which come out more or less regularly in the shape of listings. They thus perform editing and diffusing duties.
- . The Pedagogic Center supplies projects of automation. The first project, based on the program B.A.S. - The Pädagogisches Zentrum version of the Telefunken GMBH, serves to automate the preparation of the bibliography, classification cards for the filing system, and offer a documentation and information service.

The second project, set up for 1974, is a system of research for data concerning the education programs : Didactic material, samples of courses in different subjects etc... The number of facts stockpiled is between 3000 et 4000 units of information coming mostly from periodical articles. A T.V. receiver with a keyboard accompanied by a small printing keyboard is connected to the central computer belonging to a service of the city of Berlin. The complete collection of documents, corresponding to the references filed in the memory banks of the computer, are kept in the same room as the receiver, along with a pay photocopying machine ; the person using the facilities has direct access to the references as well as the texts.

Operating only in Berlin, these services can be used by all the members of the DOPAED network. Even though DOPAED concerns itself only with printed material, its structure is interesting as one of reference :

1. It is from the presentation of the DOPAED network that the EUDISED project was born ; working relations were kept with the European Council : participation with the German version of the EUDISED thesaurus (multilingual) while using the DOPAED Pädagogic thesaurus as a model.

A long term compatibility between the two thesauri is anticipated. This has been initiated by the study of Ariane ILJON concerning the concordance and compatibility of the two thesauri in pedagogics (Berlin 1974).

2. The DOPAED network has proposed formats for the registration and treatment of the audio-visual media (1972), which were taken into account by the specialists who worked on the EUDISED formats.

However, one of the members of DOPAED, the Institut Für Film und Bild im Wissenschaft und Unterricht (FWU), whose role of being the coordinating center of a network consisting of 550 German audio-visual centers, is getting ready an information bank, (see description in appendix 3), an automated system of documentation consisting of medias as well as printed material ; and it didn't quite take into account the DOPAED guidelines on the registration of the media, instead, elaborating it's own system believing the categories of descriptors of the medias set up by DOPAED to be

compatible neither with the computer chosen (Control Data - System 2000) nor with the bibliographical descriptors. This opinion is not shared by DOPAED.

The cost of operating DOPAED is estimated to be around 8 millions D.M. per year. These expenses are covered in part by the Pädagogische Zentrum (the Pedagogics center of Berlin) and in part by a donation from the Volkswagen Foundation, the institution's members also participate in the financing. A contribution from the Länder was also anticipated but it seems not to have materialized. The city of Berlin has a computer as the disposal of DOPAED for a token fee (20 D.M. an hour instead of 2800 D.M. an hour).

See appendix 3, pages 6, 10 and 11, for the costs of automated operations of the FWU.

2.2.3. Data Bank with Direct Access of the University of Québec (BADADUQ) Canada

BADADUQ, the data bank with direct access of the University of Québec, meets the need to assemble the resources of the documentation centers spread in the multiple campuses throughout the province. (see appendix 4).

- . The central office, the BADADUQ Committee (conception, coordination, evaluation) and the computer center which stocks the data of the bank, are in the city of Québec.
- . The decentralized network of libraries, documentation centers, and audio-visual service centers, each one of these constituencies have a terminal (10 up to now). Thus a system of references is constituted making it possible for the user to determine and locate the existing documents which correspond to his needs.

The user is taught to use the terminal by himself. The system is made up of two input forms for input and for documentary research, one for printed materials the other for audio-visual medias. Each constituency can enter documents into the data bank. The documentation centers of outside institutions can be hooked up to the network.

The main interest in setting up a system like BADADUQ is that it solves the problems of direct distribution of audio-visual materials. Indeed, the University of Québec studied the setting up of a pilot didactics center (appendix 5), a media "library" specialized in didactic materials, and destined particularly for teachers and teachers in training. The objective being the creation of an information network it would be accompanied little by little by a network of distribution.

The didactics "library" forms a sub-unit of the documentation centers and serves as an intermediary between these centers and the user, by making functional or thematic arrangements of material on a temporary basis : It serves at the same time as a specialized office, a marketing agency (center for sorting out loan applications, purchasing suggestions, etc...) as well as an exhibition center.

Nevertheless, the material is chosen by professors of didactics, used in different manners on the spot, reshaped, and also produced according to the needs : The function of consumer orientation in a didactics "library" is at least as important as that of documentation and distribution.

Appendix 4 details the cost of computer use. Appendix 6 situates BADADUQ inside the computer plan of the University of Québec.

2.2.4. National Institute for Pedagogics and Research Documentation (INRDP) France

In France, the INRDP, a central institution tied to the ministry of national education, performs, conforming to a program approved by this ministry, theoretical or applied research concerning teaching methods for all levels of education. It elaborates and diffuses pedagogic documentation as well as information on the contents of the teaching material.

This information is transmitted, through the Regional Centers for Pedagogic Documentation (DRDP), to the Documentation and Information Service (SDI) for the high schools and to the Departmental centers of pedagogic documentation (CDDP) for grammar school education. The INRDP and the CRDP take care of the selling of publications coming from the Ministry of National Education and also those coming from the French Office for Modern Teaching Methods (OFRATEME) (See appendix 8, OFRATEME).

But the information concerning the availability of audio-visual materials depends on the vitality of the librarians at the SDI centers for high schools and is inexistant at the elementary school level. This system seems too static to be able to meet the real needs of the users in spite of the regional decentralization (in a narrow sense).

2.2.5. National Office for Technical Development-Hungary

See appendix 7.

We will concern ourselves particularly with the Center of Information of technical films (OMKDK), a member of the international association of scientific films (AICS), which supplies information concerning national and foreign films by sending the seeker to the producers-distributors. The OMKDK was considering, at the time it was set up, listing on punch cards all existing scientific and technical films; this objective, considered non-lucrative, was abandoned. The OMKDK now chooses 1000 films a year and three people are sufficient to meet this work load. An analysis of the criteria of selection in this domain can be asked for from the OMKDK.

The ensemble of the National Agency for Technical Development is an interministerial organism which depends directly on the Hungarian government.

We do not have information concerning its employees nor its budget.

The agency is also setting up, since October 1974, an information service on scientific and technical films in the context of an international system of information exchange for the Eastern European countries. We will come back to it in sections 2.4.6. and 2.4.7.

2.2.6. Comments

a) The five national "non-producing" organisms we have just presented have in common the concentration of their energies on the cataloguing of existing material and on placing information at the disposition of the user. It seems, that an organism of exchange of educational AVM's (E.O.) cannot limit itself to this objective, especially in regions where the users do not have access to the sources of production, but the analysis of these organisms is useful on three levels :

- an E.O. even if it is not limited to being a data bank, even if it only chooses a small number of existing documents, must face the problems of filing the information. From manual handling (example : OMKDK) to an automated system permitting consultations by conversational modes (BADADUQ), these five organisms give us a spectrum of possible solutions. We will come back to the problems of automation (and what to automate and when ?) in section 3.

- four of these organisms have a network structure : network of institutions which supply information for ERIC and DOPAED, network of users, for INRDP, mixed network (supplying and giving information) for BADADUQ. This last system evidently seems the most complete. Is it a useful system at the regional level ? One doesn't need to anticipate too much in relation to the level now reached by the television news, to think that this will become quickly, theoretically feasible in the regions where computer networks are already highly developed, but certainly not in other areas.

- Agreements with these organisms should permit the E.O. to use the information and the files that they have available, in a permanent way for the E.O.'s set up in those regions where these organisms are present, for the choice and selection of documents for the E.O.'s set up in other areas.

On this subject, the laying down of international norms for the compiling of descriptive cards and their indexation and filing, would be, at the level of one region (of several ?) - a preliminary to the rational use of existing cards by an E.O.

b) We point out that other than ERIC, which sells documents (only written ones) and INRDP which sells written documents and diffuses the production of OFRATEME, these organisms of the "data bank" type do not take care of diffusion.

c) We give in the appendix (number 8), a description of the Center of Educational Technology (CET), in Great Britain, takes care of the functions of information (catalogues edited by computer) and is made up of a network structure (central unit with regional centers).

2.3 National "Producing" Organisms

2.3.1. Scientific Research Film Service (SFRS), Paris

Created in 1954, the SFRS is today tied to the French Agency of Modern Educational Methods (OFRATEME) and through it to the Ministry of National Education (national diffusion). The SFRS also receives a subsidy from the Ministry of Foreign Affairs (diffusion outside of France). The SFRS has for objectives :

- to supply French scientists with the necessary help to permit them to use the cinema toward the goals of research communication of their findings, presentation of personal opinions on a given scientific subject.
- to be the organizers of exchanges, by means of films, between French and foreign scientists.

The SFRS produces 16 m/m and 35 m/m films (500 since its creation of which, for example, 26 were finished in 1973), and also takes care of the distribution (of its own films and of those it buys). The film "library" of the SFRS presently contains 6 850 film copies. The SFRS is editing a catalogue in France (1040 titles, 5000 copies) ; universities, research labs, research institutes and mathematics studies, the university institute of technology, and education schools can all borrow films free of charge.

Two catalogues permit the foreign distribution of the SFRS films : "Scientific French Medical Films" (435 titles - 10 000 copies in three languages) and "Industrial French Films" (130 titles). Films for these catalogues are chosen by ministerial commissions. The loans are carried out through the intermediary of the embassies.

OFRATEME possesses, besides the SFRS, another "producing" organism, the Educational Radio and Television (RTS Promotions) which produces combined sets of television series (and copies on film) and also written documents for adult education.

The Central film "library", which is also a part of OFRATEME, distributes films produced by the latter to organisms and establishments specializing in teacher education programs (public and parapublic sectors). It also distributes films originating in other centers of production such as the SFRS, the Audio-Visual Center of Saint-Cloud, or private centers of production and outside films or programs for which it obtained the rights or participated in the financing. It's interesting to study the problems arising from the reproduction and the distribution that this film "library" must face. (See appendix 9).

While the SFRS, a public service, lends films in its possession, the other sectors of OFRATEME, (also a public service) sell or rent their production or those that they obtain.

Appendix 9 thus provides a more precise description of OFRATEME.

2.3.2. The Foliennne Editions, Paris

On the commercial level, the Foliennne has set up a sort of "educational programs bank" betting all on only one product : The short silent teaching films (3 minutes, Super 8, color, in preference cassettes). It serves primarily the French secondary education, but its products, mostly mathematics programs, often cross the borders. Of 3000 titles, it produced 400 ; the others coming from foreign sources mostly Anglo-American. Today the loan service is supplemented by a sales service as well. But a subscription formula, with which a projector is provided, offers a viewing system at low cost, permitting a promotion of the product. (analytical descriptions in Appendix 10). We know that the use of software especially in underdeveloped areas, is tied to the availability of equipment. The formula must also be taken seriously because, the films being silent, they permit the adaptation of pedagogic methods to different types of audiences.

The choice of a production and distribution based on a sole product has a double justification ;

- financially : low cost of films (silent) and of projector, which makes it accessible to a very large public.
- pedagogically : the use of a short and silent film avoids the passivity that can accompany the use of a document. The students participate more and the teacher must integrate this document into his teaching methods while adapting his commentaries to his public.

We note that the films not produced by the Foliennne are bought by it on exclusive contracts.

2.3.3. Committee for Continuing Teaching Activity with Radio and Television, (TRU Comittee), Sweden

In Sweden, educational radio and television programs are produced either by the education department of the Swedish Radio-Television (SR) or directly by the TRU Comittee, founded and financed by the government with the means of production of a commercial station, (two T.V. studios, color equipment, mobile equipment, video-cassette reproduction laboratory, 145 employees). The TRU productions can be freely used in a taped version, complete with accompanying documents. TRU concentrates on pre-school education (30 to 40 TV programs per year) and on adult education

Projects are initiated by the education authorities as well as by the production unit : The evaluation is made in collaboration with the pedagogic institutes and the Department of Research on viewers of SR ; a preview is organised by TRU ; the printed material is produced in cooperation with the editors. A "feed back" mechanism of continuous evaluation is performed through the means of questionnaires sent to parents and to professors who also have the right to special informational programs. Furthermore, there are regional programs for adults : Those participating must assemble their own program information (photographs, documents, interviews) on a specific theme (ex. the consequences of industrialization on the life of the region).

To make effective use of the programs, multi-media systems (TV/Video-tape, radio/magnetic tape, cassettes, printed information) are produced at the production level. Student activity is planned so as to form an ensemble (a system of instruction plus group study). At the level of diffusion, a network made up of a hundred audio-visual recording centers was set up for the printing and distribution of the programs. The centers supply films, records and slides as well. These centers are set up in the bigger cities throughout the country. Thirty of these serve as departmental centers. The creation of a national audio-visual center is envisaged, which would, with a restructuring of this organization, give a real network of distribution. The centers are in contact with the school establishment, ten groups of education tied to unions, political parties, religious organisms and libraries which supply a growing number of magnetic tapes especially to students. The service to schools is free of charge, and is provided at cost to other users.

2.3.4. Comments

We will note that the film "library" of the OFRATEME operates with about 30 employees who take care of the loan or renting of 4 000 copies of films a week, without any automation. The type of organisation of this film "library" seems to be particularly profitable. Nevertheless, at the present time, 40 % of loan orders are refused due to unavailability : The control of the returned materials, the distribution system, the allocation of copies to academic film "libraries" are thus insufficient. When this volume of exchange is

reached, the automation of certain phases of distribution could without doubt produce some improvements (see, on this subject, the study of "The Technico-Economic studies Bureau" on the audio-visual teaching : "Automation of film "libraries" and the CIME report (Bern 1974). The methods of financing productions, of participating in the financing of outside films, of buying films and copyrights, at OFRATEME concerns only a national operation having few things in common with problems which would arise within these fields were it an E.O. We will note, however, the idea of participation in "freeing copyrights" for film productions made outside this office. (this point will be developed in section 4.2.).

What seems most valuable to us in the organization of the TRU Committee, in Sweden, is everything that precedes and follows production, from the "preview" to the "feed back of evaluation", the personal research of the users, the multi-media systems, the organisation of the network of distribution, many of these elements could, without doubt, be used on a much bigger scale, maybe even on a regional level.

2.4 Multinational "non-producing" organisms

2.4.1. European Documentation and Information System for Education (EUDISED). European Council

The EUDISED project is made up of a regional decentralized network of pedagogic documentation and information, based on the most advanced computer techniques and on the theory of the division of responsibilities.

The plan followed for this project, an information system (primarily for printed material, and for other medias on a smaller scale) consists on the one hand, of an elaboration of an administrative structure which would permit the coordination of the existing national systems for cooperative exchange, and also, in the same direction, to make these systems compatible through the standardization of the documentary language (multilingual thesaurus) and through the physical means of exchange. (EUDISED formats, norms and standards)

It is not a direct access system : The national agencies serve as intermediaries between the user and EUDISED. But this second generation system offers the possibility of integrating elements from various systems, which would slow down the first experimental exchanges, but speed up its general development. Each agency would be capable of becoming a data base... but eventually, the question of making available the documents themselves could come up.

The structure : EUDISED represents three intertwined circuits.

- . regional circuit - between countries and by the means of national committees, seconded or not by national coordinating centers ;
- . linguistic circuit - centers by linguistic zones ;
- . specialised circuit - centers specialised in a field of education (ex. language studies) ;

with, in the middle, a coordinating center (permanent team at the administrative and technical levels), which would take care of the editing, standardizing, and experimenting, inquiries and evaluation duties etc... for the circuits. Furthermore, it takes care of exterior relations on the international level ; UNESCO/IRE, UNICICT/OCDE- ERIC.

EUDISED can, in fact, be assimilated into a bigger international network; on a long term basis.

In the EUDISED network, the central unit

- would create an almanac which would point out to the users, the agencies most likely to be able to help him.
- would create a catalogue of catalogues to be circulated to the agencies.
- would show a complete international collection of catalogues with which the agencies could partly or completely be provided.
- would study and define in the light of automation the following :
 - . Transmission standards : formats for records ; magnetic tapes ; tape labels ; type of presentation.
 - . Bibliographical standards : catalogue codes ; rules of classification ; filing system ; indexing system.
 - . Coding standards : media identification code ; language/country/institution/numbering of standard articles codes.
- would establish a consultation service which the agencies could call on in case of needed help for the creation of printed listings, or toward the computer programming of complex catalogues... ; or at least would establish consultation services and experts of member countries who could provide their services on the spot.

The national agencies with which the large material producers would eventually unite, would become bases for data, with, during the automation period, interchangeable tapes for sale. Taken as a whole, the tapes would, little by little, make up a complete base of a regional data system set up by local joint action. But this scheme assumes the hypothesis that each agency would specialize in a specific field of education which doesn't seem to conform to reality.

(see appendix 11).

2.4.2. International Audio-Visual Resources Service
(IAVRS) UNESCO/IPPF

The IAVRS, proposing to partly participate in the production (post production and assistant to the production), could be classified with the "producers", but its main function is to make the documents physically accessible, to promote them and distribute them directly through its regional centers. Consequently, the information, with its methods and means, directly depends on the use of media and on "feed back" from the users. The IAVRS is a network made up of four regional centers (Kuala Lumpur, Nairobi, Accra, and Bogota) coordinated by a central unit. It is the centers, on the national level, which ensure, along with governmental action, the ties between non governmental organisations, U.N. organisms, and the IPPF. Sub-regional centers will be developed in order to fill specific needs, for example, in the regions where cultural differences demand locally adapted services.

A. The Information

The information will thus be spread out on three levels, for one center :

- . at the national level, the following has been provided for :
 - 2 catalogues (classification by media and by subject) of documents developed in the country.
 - 1 catalogue of potential producers.
 - 1 catalogue on equipment (by specifications not by trademarks).
 - a complete collection of materials developed for the national use.
 - 1 collection of material samples selected for specific situations.
- . at the regional level
 - 3 catalogues (classification by media, by subject and by country of origin) of documents developed in the region.
 - 1 catalogue of producers, editors, authors, adaptors, translators, of audio-visual material

- 1 catalogue on equipment.
 - 1 complete collection of materials developed in the country.
 - 1 collection of material samples selected for specific situations.
 - a service of references, of manuals and guides on the preparation and use of the materials and equipment.
 - a stock of materials.
 - necessary equipment for stocking, demonstrating, recording, viewing and developing.
- . at the level of the central unit : (the whole network becomes a documentation center) :
- a worldwide data bank of information on all the materials produced inside or outside the IPPF (by subject, media, country of origin, producer, language etc.)
 - The coordination of registrational formats and information on the existing data banks.
 - The analysis of material prototypes corresponding to key needs.
 - The cataloguing of a collection of audio-visual materials representative of the theme of family planning.
 - A collection of sources for key materials thus determined after an evaluation.
 - necessary equipment.

Briefly, the centers have the same information/distribution/ function as the central unit, which also guarantees the general coordination.

B. The Production

The Production services, which centers like IAVRS are planning to offer, are first of all services of post-production : an efficient service of reproduction and adaptation of printed and audio-visual materials, augmented by a translation service, should for example make it possible to :

- redub the visual or magnetic tracks of a 16 m/m film

- translate and retape in the major languages the sound material for broadcasting.
- reproduce photographs, slides and fixed rolls.
- redesign posters and diagrams in relation to the ethnic group, as well as translating the text.

The equipment thought to be the most indispensable for setting this center, includes :

- listening and projection booths for the media "library"
- cleaning and verification equipment for the films
- a recording studio
- necessary equipment for a graphics service needed for the presentation of posters, demonstration models, promotional material, catalogues, etc.

A technical assistance service would provide :

- audio-visual equipment for use in presentations, a counselling service for the purchasing, manipulation and maintenance of this equipment ; a file of manufactures and specifications of the equipment ; a team ready to carry out counselling and aid missions locally (equipment installation).
- the programs : the documentation center would also provide its services for local production, development and collection of programs and the exploitation of existing programs.
- the training : concerns the amelioration of the use and quality of audio-visual material and equipment within the theme of the network, by providing technical assistance and training programs, at the presentation and organisation level for audio-visual systems, and by training personnel who, on the local or regional levels, would be using wide training methods for the formation of others in their region.

An association should eventually be envisaged with VISNEWS, a non-profit trust owned by the BBC, Reuters and the Canadian, Australian, and New Zealand Broadcasting Companies, which provides news and film information to television networks worldwide, with more than 150 stations in more than 80 countries. This association would be carried out toward the production of films. This press agency has a production service, complete with teams of technicians and producers, laboratories with dubbing means for foreign languages, consultation services for technical development and format choice, as well as materials spread worldwide.

C. Distribution :

But the main function of the documentation center is to assemble :

- 1) a collection of references of sales of second hand materials. They are found through the help of catalogues, personal recommendations and observation of sites. Insofar as it is the "window" and often part of production, the IPPF has always established a network of gatherers. Its associated members also watch out from their side for useful materials. The extent of the gathering has been determined according to the needs of the IPPF system, the available funds, stocking possibilities, presentation and use. "Development of the collection to required levels, demands the use of procedures which would make possible the accelerated rate of exchange of information between the users and the providers, a oneness with the other members of the communication procedure (information service), all of this leading to the most efficient use of the material".

The material in question depends on the theme of the network (family planning, contraception, health and nutrition, local action of the medical centers etc... and the use of audio-visual material) we find : 16 m/m films, slide trays, lantern slides and film loops, posters, cards and booklets, multi-media sets, models and material for backward projection.

- 2) a loan stock : made up of films, mostly, it concerns materials that the user can borrow for projection before deciding whether to buy it or not, or materials for festivals or programs of short duration.
- 3) a distribution stock : of which the make up will depend on the calculated needs for a program or a campaign, and from the experience gained from past orders placed with the center. The items will be controlled through index cards. The report must detail the terms and conditions of purchase, renewal of stock, sale and loan. It was decided that orders which didn't go over \$ 25 would be filled free of charge. The center would also take care of material orders not in its possession, grouping these orders when possible so as to get wholesale prices from the commercial distributors.
- 4) The shipping costs have been minutely calculated in terms of the weight, postal rates, distance and different means of transportation. It's a real necessity for the shipping service.

Finally, the VISNEWS company (see the above mentioned) could be charged with the shipping and transportation of films.

The use of the distribution network VISNEWS, would offer IAVRS the following possibilities:

- 1- negotiating with producers for the acquisition of materials filling the need of the IPPF.
- 2- the taking care of and control of the circulation of materials, on round trip to the central unit and from the regional centers to local points, the representatives of IPPF serving the role of intermediary agents : eventually, intermediaries in the distribution with international agencies close to IPPF (UNICEF, WHO).
- 3- Negotiation and counseling in problems concerning copyrights, transportation, customs.
- 4- recording on index cards all the movements of the material so as to regularly inform IPPF.
- 5- the stocking of materials
- 6- taking care of the complex book keeping of all the services rendered and of the monthly bills.

The IPPF could also use the library of newsreels belonging to VISNEWS and also have it produce an audio-visual magazine to serve as a means of information and promotion for the IPPF.

2.4.3. European Union of Radio Broadcasting (EUR).

A detailed presentation of the EUR is given in the appendix (appendix 4). We will limit ourselves here to presenting EUR in terms of an institution and to give an overall view of its action at the program and film exchange levels.

The EUR is an international organisation, non-governmental, which grouped, in 1973, 34 active members (member agencies of the International Union of Telecommunications and located in the European area) and 67 associated members (located outside of this area), without commercial or political goals. Its budget is financed by dues from active members (calculated according to the number of TV and radio sets present in the country), by contributions of associated members (in function of services received by them from the EUR), from interest coming from its own funds and from the sale of its publications (see appendix 14 for more detail).

EUR has at its head a General Assembly which regroups the totality of its members (only active members have the right to vote). It elects 15 administrators (from the active members) who form an administration council and, among them, a president and two vice-presidents. Study groups, committees (Radio-programming committees, judicial committee in Geneva ; technical committee in Brussels) and permanent services complete the EUR structure (see appendix).

In 1974, EUR numbered 200 people at the permanent services level (100 in Geneva and 100 in Brussels) ; its budget totaled 20 millions swiss francs.

The Exchange Mechanism. Among the exchanges realized by EUR, the greater number and better known are obviously those which occurred within the framework of EUROVISION (1164 hours of programs broadcasted in 1973). The EUROVISION was using in 1974 some 200 000 km of television circuits, containing 10.000 transmitters and 300 million potential TV viewers, without counting ties to INTERVISION of the East European countries and the satellite relays with networks of non-european countries.

The technical experience acquired by the EUR in this field would be a precious element for all attempts to set up a television network (educational for example) at the regional level. On the legal side, either on the EUROVISION level or on the level of exchanges of radio and television programs between two or more countries, the EUR has had to face numerous national regulations of copyright problems. The establishment of bi or multinational model contracts, the acquisition of broadcasting rights by the EUR (and the means of sharing expenses among the users) are solutions which could be inspirational to an E.O. in solving problems of exchanges.

Exchange of information (4773 new subjects broadcasted by the European zone and 669 by the others in 1973) occupies a large place in the activities of the EUR.

In the educational field, let's recall those experiences tried by EUR :

- 1) Starting in 1967, the EUR undertook to record the sequences of micro-biology (silent films) which the producers wanted put in circulation through it. A hundred sets were recorded, a catalogue was edited (total cost $\text{g} 47\ 000$). After a technical study, it was decided to leave the negatives with the International Scientific Film "Library" in Brussels who would take care of prints. The cost of prints and copyrights being paid for with each order by the "client" agency on a scale set up by the film "library" and the producers (certain films, being of governmental origin, were partly free from copyright fees). In 1971/72 this operation was functional. After three years of existence, it was decided to put an end to the experiment; the films were circulating very little. The analysis of the reasons for this failure shows that the main reason concerns the obsolescence of the films : between 67 and 72 the progress made in the field of micro-biology, and the change to color of almost all new product were enough to render obsolete the films made in 1967.

- 2) An exchange of information on television programs produced in color has allowed EUR (between 1968 and 1970) to set up files (standard index cards) on the 4 or 5 best programs produced monthly by each member. This experiment was stopped in 1970 because the number of documents gathered would have made necessary the use of a computer and a very heavy structure.
- 3) The third experiment is that of the itinerant collection of the Japanese Prize. For Western Europe, it is the EUR which receives the annual collection (now in its third year) and it is the Bayerischer Rundfunk (BR, Munich) which administers gratuitously these archives, and sends copies on loan for viewing free of charge. The users only have to assume the shipping expenses.

In the field of coproduction, the EUR limits its activities mostly to the organization of co-financing between several partners, generally in the same linguistic zone.

Other activities of the EUR, and more specifically its activities in the legal fields, are described in the appendix.

2.4.4. Itinerant collection of the Japanese Prize.

The NIPPON HOHO KYOTAI (NIHK) chooses each year, from the participants in the Japanese Prize, the 10 best programs (5 from Radio and 5 from TV) and sends copies to several regional centers (Eastern and Western Europe, Latin America, North America, Asia, etc...). Each of these centers can thus build up a collection of references which it could make available to interested parties.

2.4.5. International Radio and Television Organisation (OIRT)

The national radio and TV agencies of Eastern European countries (with the exception of Yugoslavia) are members of the OIRT. The organization founded in 1946 now has 25 members. Members must be either an official agency directly attached to a state, or agencies responsible for production (radio and TV) under the control of a state.

The OIRT cooperates with other multinational agencies : EUR, Union of Radio Broadcasters of Asia, Union of Radio Broadcasters of Arabic Countries..., United Nations, UNESCO. Its activities in all the fields of production and Radio and TV broadcasts are intense : Technical innovations and progress, development of cooperation between its members, participation in sub-regional, regional and international exchanges.

The INTERVISION system, created in 1960, assures the coordination of TV program exchanges. Its technical and coordinating centers keep up permanent ties and daily exchanges with the national television of its members and its primary partner the EUROVISION (see EUR). Intervision alone covers half the exchanges between Eastern and Western Europes.

The OIRT organizes festivals, works toward promotion of creativity in the fields of radio-television. Its members play active roles in the international happenings concerning the sale of audio-visual productions.

2.4.6. The Data Bank Project of Eastern Europe

As shown in section 2.2.5., the National Office for Technical Development of Hungary, participates, since 1974, in the setting up of an information service on the different educational audio-visual materials in light of an international system for socialist countries. We give in the appendix (appendix 19) the questionnaire which was established in october 1975, in Budapest, and accepted after few adjustments by the conference on pedagogic auxiliaries in the socialist countries. This questionnaire should be sent to participating countries in early 1976. An analysis of the answers given at a seminar grouping the governmental delegates in October 1976.

Two main problems seem to arise at this stage

- a strategic problem : The long term goals seem to be clear but the setting up of such a mechanism necessitates a step by step programmation, precise, yet sufficiently flexible to be adaptable to the reactions of participating countries.

- a linguistic problem occurs concerning the establishment of educational terms lists and audio-visual terminology ; it is generally thought that the documentary language elaborated in Russian does not allow the engendering of an indexation system in the 11 languages (and three alphabets) covering the concerned countries.

Finally their's the problem of coordination with the CMEA network described in section 2.4.8.

2.4.7. Exchange Mechanisms of Information of Technical and Scientific Films of the (CMEA)

The CMEA is putting together a scientific and technical information exchange network for socialist countries. Representatives from the different governments form the executive committee of this organization which is subdivided into "sub-networks". Each one of these sub-networks, directed by an international committee and based in one of the participating countries, is charged with the collection, treatment, and diffusion of information for a particular field. For example, the sub-network in charge of scientific and technical films is based in Hungary (2.2.5.). This sub-network has for objectives

- to assemble and diffuse information concerning technical and scientific films produced by participating countries.
- to develop and coordinate the co-production.

As of now, five countries form the sub-network (Bulgaria, Hungary, Poland, R.D.A., U.R.S.S.), Finland and Cuba have shown an interest in this organization.

Two thousand documents were held in 1975, about to be placed on computer cards. The language chosen for publication is Russian. The universal documentary classification (CDU) is used.

2.4.8. Comments

The multinational agencies just described reveal the problems that are those of all agencies of educational AVM's exchange. Institutional, documentary language, strategic problems that we will take up again in section 3.

2.5. International Organisms - "Producers".

2.5.1. International Council of Educational Means (C.I.M.E.)

The agreement elaborated by the CIME for the exchange of films is described in appendix 19. It concerns the rights of utilisation of films either for projection or for close circuit television. The exchange includes the transfer of copyrights. Membership in CIME is financially advantageous, if only because of the low membership fees payed by each member state and by the large number of films which can be had for small fees. CIME also provides for its members :

- a film "library" of references, in which the members deposit films most representative of their production
- and, in order to neutralize linguistic problems, possibilities for the members to create versions in their language from the films acquired, and, when they belong to the same linguistic group, to share the costs of producing these versions.

Thanks to an atmosphere of general accord, the member states get along well on a personal level. This is even more sensible in isolated or serial co-production, made thanks to the pooling of resources from several members. H.J.L. Jongbloed (MFDIA-Juin 1974) extrapolates the lesson from the different experiences of co-production of CIME ;

Practical questions :

- the subjects with scientific bases of which the experts are not in complete agreement, are not good subjects for co-production.
- once the subject, the public, the age group and the pedagogic approach have been fixed, the other participants must not be permitted to comment on the manuscript except in general terms...
- the production should be left in the hands of only one producer (with the responsibility and power). A coordinator should only have the power to control, from time to time, the progress of the production.

- the co-production must be carried out until the completion of a spoken version.
- the production should, if possible, be left with only one laboratory.

General questions of organization :

- The system consisting of the realization of a series of films of which each member would produce one film (on general geography), "Has not been a very happy system". But, this experience is similar to the one undertaken with success by the Agency for Cultural and Technical Cooperation (see section 2.5.2.) for television programs. A detailed study is indispensable for an E.O. which wants to adapt this system.
- The system by which only one film is produced by more than one country has been plagued by too many problems.
- The system which has enjoyed the most success - a very large distribution of the film - and that CIME has decided to keep using, is, to decide together on a subject ; designate a coordinator in charge of the progress of the project and making a synopsis of it, to be corrected together (the scenario is then written in collaboration between the coordinating committee and the producing company) ; delegate to a well known agency or company the production of the film ; collect the funds from the members of CIME for the financing : for the participating members, the sums due is proportional to their membership dues ; The members not participating in the production can obtain the material for twice the original price.

2.5.2. The Agency for Technical and Cultural Cooperation
Between Totally or partially French speaking
Countries (ACCT)

One of the objectives of ACCT is to create a sort of television and radio program bank, by choosing documents coming from the centers of educational TV production, and to serve the role of revolving door in their circulation among the producing agencies. The users in question belong to the adult and primary education fields. The elimination of copyright problems was attempted by performing an experiment of production and distribution within a free circulation network. Three films were produced around one theme, the tool : by OFRATEM (Power-Saws-color), by Radio Québec (Rockets - B.W.) and by Tele-Nigeria (Hilaire - B.W.). The three organizations gave up their rights. The agency makes the copies and distributes them, without controls over their use. The theory being that each production center receives the products of the others, this experiment, carried out successfully, should encourage as many production centers as possible to become associated with it.

Such an experiment, based on individual goodwill, is more the result of a punctual experiment than a desire to find a system of harmony on the international level. But it is characteristic of this type of initiative "to stand out from the rest", while other experiments prove that beyond a certain administrative level, the mechanisms get blocked. It thus seems that UNESCO could consider a policy of encouragement of initiatives of this type : by listing them and by promoting them, this would increase their activity and would give rise to new initiatives, and would make it possible to coordinate these efforts.

2.5.3. The General and Technical Education Committee
(Group GTE) of the European Council

The GTE committee of the European Council has for goals the facilitation of cooperation between national software producing organizations, and also the facilitation of the circulation of educational documents co-produced or not by the member states.

It intervenes in the putting into place the mechanism of international co-production and coordinates the exchange of documents that are still in the possession of national producing centers. Numerous programs have been realized and are exchanged regularly on a large scale : According to an inquiry, for the last 2 series, of 6 films each, about 5000 copies have been put in circulation in 10 countries. Each copy is used, on the average, 20 times a year and at each time by 50 students.

The programs include Biology, Physics, Geography, Teacher Training, (failure in math and living languages). Exchanges are made at cost price through the channel of producing members, a pliable formula similar to that of the EUR, and which permits the financial soundness of the system. Exchanges are often made through the intermediary of CIME.

GTE has participated in the production of more than a hundred films on technical subjects, and has studied the co-production of Ecology and Mathematics programs.

2.5.4. European Committee of Educational TV (EURO 9)

The European Committee of Educational TV for the production of programs concerning the European Community (EURO 9) is still an agency of co-production and exchanges at the European level. Each European country takes turns presiding. Previously, a meeting was organized 2 or 3 times a year in order to put together a program dividing up the work load.

Unfortunately, only one station will realize a program financed by the ensemble of the other stations. Financing is based on a unit system in function of the size of the country. The volume of production is between 2 and 3 programs yearly.

2.5.5. Nordisk Voken Undervisningsprojekt (NOVU)

The Nordic project of a multi-media system for adult education, carried out in cooperation between Denmark, Finland, Norway and Sweden is presented in the appendix (Appendix 15). We will discuss then the contents of this project. The element which seems to us to be particularly interesting for presentation here is the stage at which the cooperation among the participants of this project intervene. The third page of appendix 15 offers a procedural method of elaboration of pedagogic material ; the cooperation at the different phases of this procedure has varied in the following manner :

- | | | |
|-------------------|---|--------------------------|
| 1) Elaboration | | |
| | - analysis of the needs and objectives | } maximal cooperation |
| | - analysis of the public | |
| | - analysis of the content | |
| | - analysis of the restraints | |
| 2) Preparation | | |
| | - experimental conception of the system | } partial cooperation |
| 3) Production | | |
| | | } inexistent cooperation |
| 4) Implimentation | | |
| 5) Evaluation | | } partial cooperation |

The four countries -have set up an executive group made up of only one full time person from each country- have mostly cooperated in the preparatory and elaboratory phases, the latter being particularly developed.

Drawing up of general plans ; inquiry for the analysis of the needs, at the expert level, at the target-group level in the different countries; a description, progressively more specific of the problems faced at the beginning ; a basic decision on the themes which permit variations from one country to another ; outlining of the objectives and content while dividing up the workload between the countries ; establishment of a basic manuscript, detailing the problems to be treated, the possible explanation of phenomena, the experiments or results of research, the examples of situations likely to illustrate the theme..., for all themes (all documents being exchanged between the countries).

At the preparatory stage, the cooperation has been much more limited : meetings, diffusion of results of trial runs,... and the production and implementation have been carried out separately by each country (different themes, different institutions). The group of directors then meet for the evaluation.

It is not a matter of co-production here, but rather one of co-elaboration, or even, if the terms of productions are left to the fourth phase above-mentioned, (the setting up of the manuscript and the technical realization), the other phases could be designated by the term co-development covers phases here that are just as important as the final result, the production itself

2.5.6. Comments

The historic of the tentatives of co-productions carried out by CIME and the description of the one which provided the best results meets what we said in section 2.4.3. about the EUR (which prefers co-financing to co-production). If we envisage an E.O. which takes up the problems of co-production, its experiences would be particularly interesting. The NOVU project brings to this subject a type of research that seems more satisfactory to us : the differentiation between co-development and co-production is an approach which should be integrated into the E.O. models.

2.6. Classification of agencies chosen for analysis

The classification between "national agencies" and "multinational" is quite easy, which is not the case for the distinction between "producer" and "non-producer", this classification should have been improved to conform to reality.

Nevertheless, this does not seem useful to us ; the goal of the analysis being to bring out what could be useful in the suggestions of F.O. models and not to establish a precise classification. Commentaries in the analysis point out the least acceptable approximations and the IAVRS, for example, is put in parenthesis under "producer", while being classified under "non-producer". The distinction between "coherent" and "punctual" systems is even more aleatory, but still it shows that the agencies classified under the "punctual" system are mostly multinational "producers". It seems clear that it is in this group that productions are least advanced.

CLASSIFICATION OF AGENCIES CHOOSEN FOR ANALYSIS

		NATIONAL AGENCIES		MULTINATIONAL AGENCIES	
" Punctual " Systems	" Coherent " Systems	" Non Producers "	" Producers "	" Non Producers "	" Producers "
	ERIC DOPAED OMKDK CET BABADUQ INRDP		SFRS EOLLENNE TRU FWJ	EUDISED IAVRS CMEA	(CIME) (IAVRS)
				AUPELF EUR OIRT	CIME (AUPELFE) ACCT EURO 9 GTE NOVU

3 - INVENTORY OF THE PROBLEMS

3.1 Relative importance of the problems

A certain number of problems met by the agencies and which could come up during the setting up of an E.M. have surfaced between the lines during the analysis we have just completed. It seems useful to us, before we undertake the proposition of models for E.M.'s, to summarize them, and eventually complete the list - certain elements may not have come up in the discussion of agencies - and mostly to situate the relative importance of each one. The order of presentation is approximately the order of importance : we will begin with the institutional and strategic problems, which determine the existence and obsolescence of the A.V.M.'s, and then the more technical problems, those that seem easier to solve coming last : linguistic, financial, legal, and technological.

3.2 Institutional problems

Many of the problems brought out here are caused by the institutional procedures chosen for the organism. It seems that this is the main problem without any doubt, coming from a choice that should have preceded all the others. The different institutional types have already been listed :

- intergovernmental agency
- international organism of the "office" type dependent, for example, on a non-governmental international organization.
- private agency -non commercial- of the "foundation" type
- national organization whose actions carry to several countries in a region
- commercial agency

Another type of institutional analysis cross-checks this one and could be condensed into "who does what ?" and among others :

- who directs the E.O.
- a general assembly ?

This assembly can group one or more representatives from each member -if all members are states, a certain unity in the choice of these representatives seems desirable (same level of responsibility, same sector of activity). This could cause problems if the organization of the educational systems of the countries are different (audio-visual tied to the Ministry of National Education ? to

primary education ? to higher education ? to educational planning ?... to technical education -in the case of scientific and technical films- tied to education of Ministry of Industry ?...) If the members are private institutions other thorns will come up : commercial organizations (cooperation or competition ?), non profit organizations, mixture of both ? The more disparity between the members the harder it is to establish an efficient cooperation. In all circumstances, if the representative of the country or agency does not have real decision-making authority, this assembly cannot function efficiently. This implies that the limit of action of an E.O. (area of activity -size of financial limitation- limit of possibility of intervention in the educational system etc.) must be clearly set so that the representative can assume, within those limits, the necessary authority from his government or agency.

- an executive committee ? commissions ?

If the number of members is high, the awkwardness of running a general assembly could make it necessary to set up an executive committee. If the field of activity of an E.O. is vast, it can be necessary to divide it up into sections, managed by commissions. The problems are the same here as those of a general assembly, with in addition, the responsibility of this committee, of these commissions : with respect to the general assembly, who has the final say ? with respect to the governments or organizations ? If the number of members is thus that each one cannot have a representative in the executive committee or in each commission, maintaining a general assembly which controls these committees or commissions seems indispensable. Furthermore it's necessary that this control does not paralyse the decision-making abilities of these committees and/or commissions. (Here also there is a need for precision in the limitation of authority). Committees and/or commissions can be set up permanently by a general assembly which meets periodically.

- A director ?

This last hypothesis seems to suit only those organizations having but a few members. The director then replaces the executive committee. That is, if it is not a question of a third level of responsibility, the executive committee electing a director.

- Other possibilities can come up (directorship carried out in turn by each member, responsibility by each country for one part of the activity of the E.O. etc.) In all cases what has been said about the general assembly also holds here : it is necessary that those in charge have real power for making decisions but within clearly defined limits.

- another way to present this problem could be to ask :
 - who recruits the technical and administrative staff ?
 - are there permanent researchers or didacticians ?
 - who manages the budget, decides on investments ?
 - who decides the conditions of exchanges (relative value of the materials)

This list is obviously far from being complete. The drawing up of a decision chart (or at least a recommendation chart) for the choice of an institutional procedure must include :

- The listing of a series of questions of this type which would be as complete as possible and submitted to a certain number of agencies.
- That these same agencies also accept to specify with the most possible precision the investments necessary for setting up that agency, and its budget for the last several years.
- The acquisition, from these agencies, of an evaluation of production (number, density, quality) and/or the exchanges it has permitted.

We do not have available most of these elements. Even-though, a few comments must be given :

- the users from a country in a region can be a leading element in the choice of an institutional type.
- Who should be the people directing an agency ?
 - . professionals ?
 - . didacticians ?
 - . licenced representatives of the countries ?

It seems necessary that the technical competence must be present at this level but we have just underlined the importance of the necessary decision-making power.

3.3 "Strategic" problems

3.3.1. "Strategy" in the setting up of an E.M.

It would be useful to ask if the ideas circulate in the same manner as the products. The keeping out, the non-use of materials, etc. are often

caused by the fact that a new material demands a change of attitude (in relation to the acquired knowledge of an adult, and in rapport with the "group relations" for a teacher, etc.) and that this change of attitude can not happen without information, research, previous reflection on the part of the users. The success of a program of co-production or of circulation of material, assumes that, from the beginning, the users become the producers who would become used to working together, reflect on their needs, on what a particular document could bring them (or what it doesn't bring them) and to let it be known. It is thus suitable to begin very slowly : an awkward machinery would block this progress. What about at the state or agency level ? The scheme of communication is even more complex and it is certain that, for a co-production between several agencies to have a chance of success it is desirable that these agencies are already used to working together and thinking together (see section 4.5.) and that it could be interesting for an E.M. to limit itself to the exchange of A.V.M.'s already existing, before attempting to carry out a co-production. To suggestions of "strategy", one could answer with the opposite arguments ; The exchange mechanism could create user reflexes which do not prepare it for co-production. A serious job of reflection, of questionnaires like the one which is being realized in Eastern Europe (2.4.6.) could help to mitigate this inconvenience.

Other "strategies" can be envisaged :

- begin the exchange -or co-production with 2 or 3 countries and then spread out to those having the same language and then to those of other languages
- begin with only one media and then diversify.
- begin aiming for only one public...
- begin in only one field of education...
- ... etc.

None of these strategies is valid by itself, it depends on the region, the organisms, the habit of working or not together, of the type of institution, etc., but the choice of a strategy must be made one at a time for each E.M. project.

3.3.2. E.M. and characteristics of the regions

The choice of one of the models in section 4 (or of another model or of an intermediary model) must be the result of a previous study on :

- that which the states desire to place their emphasis on, in the field of education,
- the agreements that they are ready to accept in the legal, financial areas,
- the determination of the first productions to be worked on,
- the technical, linguistic, pedagogic, ... problems that will come out in these first relationships,
- what is intended for production on a long term basis, etc.

We cannot then determine ahead of time what type of E.M. is suitable for such or such a region or sub-region, but it is still possible to point out that certain regions and certain models are incompatible. We particularly think that if an E.M. which does not take care of transfers of mediums, adaptations, copies and especially production and distribution can be very convenient for regions where there is a large number of equipment, it would be particularly inadaptable to those countries where little or non existent technical equipment, do not englobe production, technical aspects and distribution.

The importance of the E.M. and the type of media which it will encompass (videotape to fixed film) evidently depends also on the size of the budget available for this type of investment from a country of a given region. International agencies will surely have, at this level, a "balancing" action on the different means available. But this action should take into account the role medias can play in a given region or country : It's impossible to carry on a study on the development of the educational systems without tying it tightly to the rural and industrial development in the area where the problem is raised.

3.3.3. M.E. and automation

In a completely different train of thought, we could ask ourselves at which stage is it convenient to introduce automation into an E.O. The above mentioned brings out the first answer : no heavy "machinery" at the beginning, and thus no need for automation. Afterwards, and now it becomes a technical question, it's necessary to determine starting from what number of documents, the manual handling becomes insufficient or would stand to gain from its automation, see what was brought out in section 2.3.1. about the SFRS and the report of the BETEA (Bureau for Technico-Economic Studies relative to audio-visual methods of teaching) "Automation of the film "library" " (appendix 18). The premature introduction of computers could bother the efficiency of an organization. Automation must, from the beginning, lead to results at least as good as those of manual handling, on a short term, a saving of time and then the possibility of handling a greater number of data and deriving from them more complete results.

What can be automated ?

- the catalogues (CET, ERIC etc.) an E.O. which does not seek an overwhelming catalogue, the usefulness of automation at this stage can become apparent only after several years of functioning, except when, in those regions where it's possible, the connection with an existing catalogue simplifies the choice and selection,
- the administration of stocks, of loans and of locals, the need for automation here occurs earlier,
- statistics made from questionnaires of evaluation of needs, of pre-testing, of feed-back, the automation here could make it possible to quickly take into account the information recieved. It is still a very heavy mechanism which should be only applied by an E.O. which is already functioning since several years with a very large market.

3.4 Choice of educational A.V.M.'s

It's at the level of elaboration of the program of each E.M. that the choice of criterias in the selectioning of A.V.M.'s should be made. We can take up the first elements of the experimental phase of the NOVU project :

- analysis of the needs and objectives
- analysis of the public
- analysis of the content
- analysis of the restraints

It should also be added the relative choice of media, the type of intervention on the pedagogic plan (module or complete program) and on the technical plan (length, one or more sequences, etc.)

In the case of use of existing material, these choices can only be made in an approximate manner and it would be particularly difficult if several users, having slightly different needs, must choose together.

In the case of a production, all of these choices are made prior to the beginning of the production and certainly determining its value. Let us borrow from a report to the European Council (European co-production of multimedia educational programs. CCCTE (74) 23) a few ideas relative to the NOVU project :

- A program cannot all be elaborated at one time
- The presence of the producers is desirable from the beginning (in other words, well before the beginning of the production)
- concerning the choice of media(s) :
 - the drawing up of a decision chart is a possibility, one should be careful not to be carried away by institutional sluggishness which leads to choosings "the same media as usual "without a real discussion,
 - the function of the media must be set.

On this last point, we should also add that the choice of the media(s) must take into account the cost, the region where the E.O. is, the type of pedagogic evolution chosen by such or such a country. For example, although television makes it possible to reach, easier, the adult population in a dispersed area, it also implies a technological investment which is not necessarily positive for such countries (technological dependence, etc.) and not always possible (maintenance, cost of operation, etc.) and it imposes a unique and centralized

educational model.

Also on this level, the institutional structure and particularly the "who chooses" is fundamental.

3.5 Obsolescence of A.V.M.'s

We won't discuss the "technological" obsolescence of a document, here, but the "lifespan" in terms of its real use : that is the time during which it is effectively used by the members of the E.O. The frequency of use of an AVM (the number of times it is checked out per year, if it is lent, or the number of times it is used by the members if it is sold.) is a precious indicator of the degree of obsolescence that it has reached. The real lifespan of a document could orient the decision of buying or producing similar materials. Other elements to be taken into account :

- color is replacing black and white for films, slides (and in the near future television as well without any doubt) and thus, documents realized in B.W. risk "growing old" very quickly.
- the obsolescence of documents produced in areas of rapid progress (micro-biology- see the example of the EUR, as well as all spearhead scientific areas, documents heavily influenced by current events, etc.) is also very rapid. Their production of purchase would have to be taken into account.
- in the heavily equipped regions, certain medias could very quickly become used more or used less (what happens to slides or film rolls next to television ?)
- the opposite is also true, modern medias could be very little used from lack of habit.

3.6 Linguistic problems

These problems occur at all levels :

- at the adaptation phase of documents (see section 3.9 models 2, 3, and 4)
- at the level of catalogue composition : the composition of the index tables of terms relative to audiovisual and multilingual pedagogics

- at the level of choosing a working language(s).

If some of these problems have technical implications, none can be solved without an accord between the countries or agencies involved this is a fundamental element.

A particularly important aspect of this problem is the choice of the language in which the thesaurus of the documentary system will be written. We have presented in section 2.4.7. (The Eastern European countries) a characteristic case : 10 countries, 11 languages, 3 alphabets, which to choose for the thesaurus. The multilingual thesaurus of EUDISED and the possibility to render other thesauri compatible with it, is without doubt, one of the possible solutions. Let us refer you, concerning this subject to the study of Arian Iljon : "Concordance and compatibility of two pedagogic thesauri : The monolingual thesaurus of DOPAED and the multilingual thesaurus of EUDISED" (Berlin : Pädagogisches Zentrum - 1974).

3.7 Financial problems

The problems of variable costs of operation (tied to such an exchange, to such a production) will come up in the different models. As for original expenses, (office, materials, etc.) and operating costs (salaries, maintenance of material etc.) the solution chosen depends mostly on the choice of institutional structure adopted for the E.O.

- Expenses (fixed plus investments) could be taken care of partly or completely by the E.O. (the UNESCO program in underdeveloped countries for instance)
- The expenses could be taken care of by the member countries (intergovernmental agencies)
- or by member agencies, E.O. of the "office" type (EUR) and in both of these cases, how are they divided up ?

In function of the wealth of the country or agency ?
proportional to the service requested from the E.O. ?

- In the case of a commercial type of agency, the sales price of the materials would include the fixed expenses as well as investments.

But this choice can also take into account the following elements :

- The "commercial" solution seems little favorable to the development of exchanges, the selling price of the materials being necessarily very high (to allow for the depreciation of a video studio in the setting up of the selling price for example). Unless it limits itself to one unique type of service (FRIC) or product, and in this case buying it inexpensively (EOLIANNE).

- The sharing of costs in function of services rendered (type EUR, still, here, the taking into account of the number of TV sets in a country, in a certain way, takes into account its financial capabilities) is only possible in those cases where all the countries or agencies have similar capabilities barring a rectification through the backing of the F.O. to those countries with smaller financial possibilities.
- The sharing of costs in function of financial means of the participants, assumes a previous agreement which has little chance of happening if the disparity is too large.
- The total assumption of the costs by an E.O. (underdeveloped countries) creates the problem of financial and technical dependence for these countries.

This financial problem, even if it is less important than the choice of the institutional structure of the E.O. (of which it is dependent) is still essential to the well functioning of all organisms of exchange.

3.8 Legal problems

The institutional organization of an E.M. having been treated in section 3.2, we won't discuss it again here : in each country, the legal aspect of an E.O. for a given institutional structure will be based on the rules in effect.

Contracts with other institutions will also vary along with the institutional structure of the two organisms involved : no doubt easier between 2 public agencies or 2 private ones, the purchase or renting of AVM's will require the establishment of more complex conventions between two institutionally different agencies.

The major legal problems involve "intellectual" rights and copyrights. You will find two documents in the appendix :

- "The essential national and international positions on copyrights" - excerpt from a report of Mr DEPRAD, European Council, nov. 1974 (appendix 16).

- The 5th section (Judicial activities) of appendix 14, on the EUR, although giving only a brief study, it is still well furnished with these problems - here we will limit ourselves to a brief summary.

When an E.O. buys or rents existing AVM's or when an E.O. produces A.V.M.'s without obtaining the copyrights from the author and from the financial agencies of copyrights and neighboring rights, it would have to add these to the variable operating expenses, sharing them between itself and its members just like other expenses (see section 3.7. and the divers models in section 4). To ease exchanges between member countries or agencies, or between them and other organizations, an E. O. could prepare standard contracts similar to those prepared by EUR for its members (appendix 14). The solution that, to us, seems to favor the most exchanges is evidently the one consisting of - in the case of a production by a member of the E.O. - or a co-production involving several members - a conventional decision for these productions to be free of all rights - for all the members of the E.O. or only for those having participated in the production.

3.9 Technological problems

Cataloguing problems : we will develop in sect. 4.2. the case of an E.O. which centers its activities around the cataloguing of existing documents. In all the other cases (O.E. taking mostly care of diffusing or producing) the cataloguing has less importance. Nevertheless, it is useful that it be done in a manner compatible with those of other data banks where the E.O. must operate (concerning this subject, see what has been said about the project of the data bank in Eastern Europe). More than on the level of documentary methods, this problem can be an important one on the linguistic level (see sect. 3.6.)

- . Problems of stocking (for memory banks : its purely a material problem)
- . Problems of transfers of mediums and adaptations. The purely technical aspects of this problem is treated in the appendix (appendix 17). What seems to us of primary importance here is to try to determine when a transfer of mediums becomes really necessary, when it is profitable - a transfer is always burdensome and - at the level of production, for example, an accord between the clients who finance the production or between the co-producers must aim at their elimination or limitation of their number : choice of the same media or medias, of the same format, of the same standards by all the

users of a given series of documents, co-production by countries or agencies belonging to the same linguistic group or production of inter-negatives from which the countries of the same language realize the adaptations. Concerning the use of existing documents, appendix 17 shows that if the duplication or reduction of films, and at the limit, the dubbing of the sound in a film does not pose any major problems, the transfer of film into video-tape or the opposite, the enlargement of films and even the duplication of video tapes are much more expensive. It seems appropriate, before considering such a transfer of mediums, to ask one's self if the document has enough interest and is sufficiently adapted to the country in which it must be used and if it wouldn't be more "profitable" (ratio price/efficiency) to produce another document geared more to the structure and to the standards needed and better adapted for the use for which it was intended. It also seems appropriate to ask if the document won't lose its value too quickly to justify a transfer (see sect. 3.5.). It would be interesting to ask the IAVRS to evaluate the cost of transfers which it realizes and to evaluate the use of the documents thus obtained.

- . Problems of production. The problems of production arise mostly from the choice of the media (see section 3.4.)
- . Problems of diffusion. All the models of E.O.'s that will be considered in section 4 except for the first one, provide for the diffusion of the documents. All the possibilities come up in the organisms presented : diffusion through the mail (at the expense of the user-agency included in the operating costs and should be shared by the members, etc.), the use of a commercial agency (IAVRS), decentralization of stockage areas, etc. It seems that the solutions here must be chosen one at a time in function of the region, the costs, the type of institution, etc. Either way, a network structure permitting the decentralization of the organism facilitates the diffusion.

None of these technical problems are fundamental ones ; more than looking for a solution, it is often a question of choosing the best for a given situation. Nevertheless, of this choice could depend the success of an operation.

4 - A FEW SUGGESTIONS OF EXCHANGE MECHANISMS MODELS (E.M.)4.1 Choice of models

The choice of models could be made in function of several axes : E.M. for such or such a region - for such or such a level of intervention - in function of the type of institution - in function of the objectives of operation etc.

We have kept this last axis because it is concerning this one that the preliminary analysis has provided us with the most elements. The other elements will still be considered in the suggestion of models.

We chose 5 of the most important functions of an E.M., the table below presents the four proposed models (among many other possible ones) by the functions which would be filled by an E.M. built from this model.

	Choice and selection of catalogue	Stocking	Adaptations Transfers of Mediums	Production	Distribution
A	+	+			
B	+ Limited to that which is rept for diffusion	+			+
C	+ Limited to that which is rept for diffusion	+	+		+
D	Limited to that wich is rept for diffusion plus that which is produced	(+)	(+)	+	+

4.2 Model A

A first choice among possible objectives could be to limit ourselves to a catalogue of existing documents. Some of the agencies described in section 2 are of this type (ERIC, CEP, OMKDK, DOPAED, etc..., and those yet to be created). Is the establishment of an international catalogue or a regional one, carried to a high degree of completeness in the area of educational documents and programs, desirable ?

This would imply :

- an international agreement on the bibliographical organization. This agreement does not exist for printed documents, and even less so for audio-visual ones. The cataloguing rules for non-printed material established by the "Media Cataloguing Rules Committee of the British Library Association" seems to be the favored one at the international level (Anglo-American world, the IAVRS project, etc.) but this agreement should be spread to the descriptors used (concordance between the existing thesauri ; UNESCO, IBE, ERIC, EUDISED, OCDE, etc. and all of those yet to be made), to the automation programs, etc. Although it is sought by many organizations, waiting for its realization would hold back all E.O. projects.
- the establishment of all the national catalogues, of which the regional one would be the synthesis. Here, also, the delays would be enormous.
- a permanent bringing up to date, which is expensive and difficult.
- an extremely heavy investment.

And such a catalogue would probably not answer the needs of the users who would most likely be more interested by :

- more specialized catalogues rather than more all-encompassing ones (example : literature programs, x century y country for students of the level z, programs of perfectionment for spanish speaking agricultural monitors having to control the irrigation by the use of a dam, etc.)
- a selection of materials in function of technical possibilities of usage (structure, format, language etc.) and of their pedagogic value.
- indications on the cost and possibilities of augmenting this material.

The E.M. model would thus essentially have to resolve the problems of choice and selection of the materials.

What criterias of choice could we keep in mind ?

- a first criteria is given to us by the point brought out above : the availability and cost of the materials :

can only be chosen those that the countries or agencies want to put into circulation.

The problems of renting or buying the rights of reproduction and copyrights, are here at the expense of the user, but the catalogue of the exchange organism (E.O.) should point that out.

- evaluation of the quality of the materials on the technical level and mostly on the contents plan :
 - . format and cinematographic quality of films, formats standards, and quality of the recording of sound documents (magnetic tapes) or magnetoscopes, etc. "the tests of conclusion" of the written documents does not exist for sound documents ; the evaluation of readability creates a problem of semiology of sounds, of images which differ from one region to another and, without doubt, from one country to another of the same region.
 - . precise subject of the document, evaluation of the area covered by a document in comparison with the entirety of the subject, of the information brought out.
 - . type of approach of the subject and socio-cultural implications of this approach : this is particularly important if the document is "mobil" between the regions or countries and that there are important cultural, economic differences between these two regions, these two countries.
 - . public aimed for (age, educational or professional situation, a grouped or dispersed public, etc.) and the public realistically touched by the document.

Circulation of the documents

This type of E.M. thus only takes care of bringing together the potential user of a document and the one who possess it. CET (appendix 9) establishes that this encourages very little the circulation of documents. On the other hand, other agencies seem to be functioning fine with it. The way in which the information is diffused (the catalogues) and the integration of this E.O., into the same system as its users is, without any doubt, essential.

Organization of this type of E.O.

The estimation of the number of personnel and office space needed, the type of investment and operating costs, are given in a table in section 4.6.

On the institutional side, the analysis gives us very different examples of perfecting this type of E.M. : commercial agency (ERIC) or governmental (DOPAED, FWU, NATIONAL OFFICE OF TECHNICAL DEVELOPMENT of Hungaria etc...). We think that it could be interesting if the institutional structure of this type of organism

marries into the one of its users : a commercial data bank serving a national education system would present some problems, would integrate badly into the system.

4.3 Model B

Let us consider, here, an E.O. which would obtain existing programs, would stock and distribute them. The film "library" of OPERATEM, and on a national scale, the OCDE can illustrate this model.

The problems of choice and selection will come up here just as they did in model A (how ? who ?).

An additional element : in the model A, the purchase or renting is done by the user in function of his needs, thus the E.O. has only to take into account the production of useful catalogues, here, the purchase of materials being taken care of by the E.O., the knowledge of the needs of the users is of capital importance, the selection must be very tight and accompanied by a real "market study", a pre-testing of materials prior to any acquisition.

Legal and Administrative problems

- . at the level of acquisition of materials the copyrights problem comes up. We will refer to the study realized for the European Council (appendix 16). Copyrights could be paid for by the producing countries (example ; ACCT, section 2.5.2.), it would then become a question of defining the terms of an exchange (see the above mentioned) or purchased by the E.O. which then divides it up among the memberships (proportionally to the dues, number of documents used, etc., this is to be defined), on the other hand, it would be quite impractical that it not be globally taken care of for the full period of usefulness (5 years ? 10 years ? more ? and for all possible users.)
- . customs barriers are practically inexistant thanks to the tariff rate agreement of UNESCO. The materials are shipped either under cover of an import liscence delivered by the exporting country (the Beirout accord) or under the authorisation given to an appropriate agency, liscended by the importing country (the Florence accord).
- . in theory, there are no more importation quotas ; except for programs produced by certain commercial companies (ITV in Great Britain.) But one can always obtain an exemption when the user is an educational organism.
- . for this system to work, it is necessary that the E.O. treat globally the legal and financial aspects, which would imply a whole range of accords with the administrations of the member countries. These accords will certainly be different from one region to another, between the countries enjoying commercial ties and between those that do not.

Financial problems

- . The productions can be exchanged (see the above-mentioned) in this case the only expenses left to be taken care of are shipping expenses of the production to the E.O. (these could be taken care of by the E.O. and divided up among the member states in a previously established manner) and from the E.O. to the users and back.
- . The productions could be sold to the E.O. The users rent and/or buy them from the E.O., renting being either an end in itself or just a means of viewing of experimentation (example : the Eolienne publishing company section 2.3.2.). The purchase by the E.O. could be made at cost price if the producer is a national organism (this would then be a part of a regional agreement) and if it concerns a commercial society, the profit margin could be limited (accord between the E.O. and producers). The sale or loan by the E.O. could cover the costs (expenses taken care of by the E.O., see "organization", or including a margin of profit permitting the cancelation of the financial participation of the E.O.
- . Such a system can only work if it does not lose money for the member countries. A too large a difference in the financial capabilities of countries of the same region could also paralyse this system : the participation of the E.O. should then be modulated in the light of these two facts.

Technical and linguistic problems

- . The E.O. not taking care of any medium transfers and these transfers being generally very expensive (see appendix 17) the ideal situation would be for all the member countries to set up norms of production : format and speed of magnetic tapes and films. Type of machines for taperecorders... permitting the avoidance of medium transfers, at least the more expensive ones (see table in appendix 17).

- . The E.O. not taking care of adaptations, here, an agreement between member countries should make it possible to resolve the linguistic problems for sound documents : copies of films without sound tracks (or with only the inside sound track which is without doubt a better solution). Common production of the soundtracks by countries of the same languages, etc.

Psychological and Pedagogic problems

- . They should be practically inexistant if the choices and selections were made with the participation of all the member countries, in practice, it is mostly at the "on the spot" level that will occur most of the problems, even for those materials accepted by the administration of the countries. This underlines again the need for a "pre-testing" (see what is done - at the production level - by the TRU committee, in Sweden - section 2.3.3.), and attaches a particular importance to the "feed-back" ; inquiries at the user level could influence the orientation of the beginning. "modulatory" documents capable of being integrated into divers educational programs will "pass" more readily than "educational programs" multi-media or not, they can constitute a suseptibilization and information phase.

Exchange of materials

- . The substitution of exchange procedures for more commercial procedures of purchasing or renting, shows an amelioration, a point for an E.O. of this type. But the terms of exchange must be defined : between countries having very different financial resources and producing materials of opposite quality (from 8 m/m B.W. to 31 m/m color or from film rolls to video tape). The exchange seems difficult. Two elements can intervene here :
 - the aid brought by the E.O. to the countries could be varied along the financial possibilities of these countries.
 - a financial type of operation (purchase - sale - rent) could permit the standardization of the quality of the products and be a precondition to exchanges.

"Non-physical" stocking

- . We can also consider that the E.O. does not assume the actual stock of the documents, it contents itself with what we can call a "legal" stock ; its activities are the same as those of the preceding model but the documents go directly from the producer to the user :
 - the financial aspects could be taken care of by the E.O. which buys and sells the materials.
 - purchasing/selling/renting could be taken care of by the members : the E.O. plays the unique role at the level of accords on tariffs and copyrights.

This solution eliminates technical personnel (except for the necessary technical assistance to certain countries) and would also eliminate stock rooms, the investment becomes then quite reduced.

Information and Promotion

- . An E.O. of this type would not have to create a catalogue like model A. It would, nevertheless, have to establish and keep up to date and diffuse the catalogue of materials which it has selected, stocked and diffused and/or listings of presentation of the documents. Demonstration samples could be made available for the users for viewing (or several decentralized collections). This is done as an informational goal for exchanges, especially if this E.O. is open to other users as well as members.

Radio-Television

- . this seems to be the ideal model for an E.O. which includes among its objectives the promotion of exchanges among countries or agencies members of radio or television broadcasting programs (TRU Committee, EUR, etc.).

Organization of this type of E.O.

- . For personnel, office space etc... see section 4.6. An E.O. based on this model could be a commercial agency if it rents documents or if the volume of diffusion or the choice of an inexpensive media permit it to sell them at an interesting price likely to encourage possible users.

If it is a question of a non-commercial agency, the choice of documents, the management of the stock, of the pulling out, assumes that the "decision makers" of this agency be in tight liason with the users ; that they know their needs, the university and school programs if it's an educational agency, and with the financial resources, especially if it handles expensive medias (video-tape and even sound films or television).

4.4 Model C

An E.O. could be more heavily equipped and take care of mediums transfers of materials and also take care of adaptations. This model seems to be well illustrated by the IAVRS (section 2.4.2.) projects. The organizational legal, administrative, financial problems would be similar to those of model B, but would also include the taking charge of technical problems of medium transfers, when a document is produced on a format incompatible with the materials of other members, or users, of the copies made, and would also take care of adaptations into the different languages.

Transfers. We have already discussed in section 3.9. the problem of the profitability of transfers, appendix 17 gives an overall view of the technical problems which occur and of the transfers that require heavy materials.

let us mention that :

- the IAVRS on takes care of a limited area at the media level : copies of films, photographs, etc.
- the EUR which covers video, transfers of video/film and the inverse, but its public is the general public and its equipment is in constant use.
- OFRATOME which produces educational television broadcasts and makes copies of them on film has a relatively large audience. Its equipment is nevertheless actually under - used.

It seems that an E.O. of this type should :

- either exclude expensive transfers
- or be sure to sufficiently use its material so as to make the investment profitable and thus have a very large area of activity and numerous users.

Financing and Organization

The financing of investments and fixed expenses have been discussed in section 3.3. Here, it is quite large (film laboratories - dubbing studios - magnetoscopes - transcoders etc.) and- in the field of education in any case, probably cannot be taken charge of by an agency dependent on a large international organization or by an inter-governmental agency : if the E.O. had to pass on this financment on to the price of services rendered to users, it would become more expensive than for him to go through a professional laboratory.

The variable costs, relative to the work done, could here also, be paid for either by the users or by the E.O. with those costs passed on proportionally to the members, etc.

Another possibility would be to have the medium transfers done by a commercial laboratory or agency. This type of E.O. would closely resemble the one in model B, with variable costs of medium transfers and shipping added on

Countries having a very small budget destined for A.V.M.'s

Neither of the two suggested models is convenient for those countries : the first assumes investments and expenses which they would not be able to take care of. If the financing is taken care of by the E.O. from international funds, we are again faced with the problems of technical dependence, discussed earlier - the second requires the existence, in the proximity of the users, of laboratories or commercial agencies capable of realizing the work, which is not the case.

4.5 Model D

Let us introduce the last dimension into this model of E.O., production. Supposing that an E.O. of this model plays a coordinating role : it produces nothing itself. There would thus be no need here of either technical personnel or heavy materials.

ACCT, the EGT committee of the European Council, EUR, EURO 9 committee and especially CIME, illustrate this model.

The experiences of CIME include a "complete spectrum" of the different types of co-production : productions of series of films of which each member country produces one ; production of only one film by several countries : production by an organism, a company chosen by member states after the choice of a subject by a coordinator and the establishment of a synopsis in common. For the first two types, which haven't given good results, see section 2.5.1. and appendix 13. The designation, by member countries, of a coordinator responsible for the whole production seems to be the best solution. The awkwardness of administrative machineries often block co-productions : this obstacle should not exist at the E.O. level if the accords between the members are sufficiently precise (usefulness of a phase of the model B type here ?) (see section 5.5).

Legal problems

In the case of a co-production coordinated by a regional agency, the problem of copyrights should be taken care of at its roots : liberty of previously determined exploitations at least for all the participants in the co-production and preferably for all the members of the E.O., for a minimum of 40 years, through a contract with the producers.

Organization of this E.M.

We have just underlined the need to avoid administrative "awkwardness" : it is here that the make-up of the decision-making organ is especially important. To plan for a representative from each country (or even two like the project elaborated by Hungary for the East European countries : appendix 3) seems already too "awkward". Could a two-level organization : an assembly grouping experts and representatives from each country and from the BRPE, which would define a "policy", validate combined projects, etc... and a smaller committee (elected ? taking turns ?) which would have decision-making authority ? Actually it's an institutional analysis that should be made for each case so as to determine the structure that would be the most representative, since there will be production costs, sometimes quite heavy, to be shared, and at the same time the most flexible.

The weakness of the NOVU project, of which we have already discussed on several opportunities (section 2.5.5.) has been this institutional aspect since there wasn't even a common secretariat, certain project directors had no real decision-making powers in their countries etc... that institutions going from commercial societies to administrations had to work together without any previous framework having been worked out etc... and it's without any doubt, the flexibility of decisions of the executive group which made the project, giving very good results, possible.

Phases of co-production

The distinction made by NOVU between co-production and co-development, underlines the importance of preparatory stages before the actual production (let us here mention again the pre-testing of the TRU committee- section 2.3.3.) and the stages of evaluation, without going so far as to send the production back to each partner (or to only one among them like CIME), it seems necessary to develop the analysis and preliminary work (see also section 3.3.). A co-production (in the NOVU sens) by several partners, pointed out as a source of failure by CIME and EUR, could possibly succeed through the means of these preparatory phases. Let us also bring to attention that if the project has to be prepared by didacticians and then placed in the hands of a producer, it is necessary for the producer to participate in the going-ons of the preparatory phases.

Financial problems

The type of structure proposed above for this E.O. model, would allow at the financial level (available expenses and productions) the presentation of an encompassing budget (including a possible margin of error) for one or more productions, to be made to the "assembly" and then presented to the smaller committee, alone responsible for the implementation of the production.

The sharing of the costs of production could be made between all the members, or only between those who are directly interested in such or such a production, the E.O. playing a balancing role toward those countries having a limited budget destined for A.V.M.'s

E.O. as the producer

In certain cases (regions without production equipment), the E.O. could become the producer. In this case, the E.O. would become more like model C (office space, personnel, materials), but it would be just as important for all the concerned members to participate in all phases of production.

4.6 Summary table

The table on the next page presents in a global manner several elements concerning the foreseeable needs of each model of E.O., in personnel, office space, as well as elements concerning necessary investments and operating costs. Concerning the personnel and office space, we took as an element of comparison, agencies (section 2) having about the same functions. As for investments and operating costs, the sums we have available were too incomplete to be able to provide any estimation. A systematic questionnaire, such as the one proposed in section 3.2., would be necessary before a proposal of relatively accurate cost estimates.

After each of the two headings, concerning financment, we placed two columns giving suggested answers to the question "directed by who ?" (Section 1 the members, governments, or users ? section 2 by the BRPE). A second axis crossing these columns to distinguish ;

- a) countries having a limited budget destined for A.V.M.'s
- b) countries having a larger budget for A.V.M.'s. This notion is obviously very relative but it's impossible not to take into account (see section 3.3.).

Personnel	Office-space	(outside of office space)	G.U.	E.O.	Operations	G.U.	E.O.	
							a	b
5 to 20 people (except if automated) didacticians documentalists secretaries	offices + filing cabinets 100 to 500 m2 (except if automated)	almost none (viewing equipment)	-	-	salaries	-	-	a
				+			publishing	+
30 to 60 people didacticians documentalists secretaries technicians	offices + filing cabinets + warehouse + studios 3 to 600 m2	of little importance (viewing equipment, cleaning and repairing equipment etc...)	(+)	+	salaries film purchase-copies film maintenance, AVM'S	+	(+)	a
				+				+
could reach people at least half of them technicians	offices studios, etc...	very important (heavy machineries studios etc...)	+	+	salaries	+	+	a
				+			very heavy technical expenses	+
10 to 20 people didacticians secretaries	offices (200 to 500 m2)	almost none (viewing equipment)	(+)	+	salaries	+	(+)	a
				+			participation in production costs (2)	+

G.U. : Governments or Users

5 - CONCLUSION

This study of Multinational Exchange Mechanisms of Educational Audio-Visual Materials, leads us - through the description of some of the existing agencies, the analysis of the problematic and elaboration of suggestions of models - to propose an approach which would make possible the specification of the institutional structure adopted by an Exchange Organism, the strategy chosen to put it in place and the reach of its field of operation. The analysis of the problems (section 3) allowed us to see that all these are a function of its preliminary choices : no legal, technical, linguistic etc. problems can prevent the workings of an exchange mechanism, if these choices were made in function of an analysis of objectives such as they are seen by the countries or agencies which it will concern and by the international organization which will eventually coordinate it (or start it off or finance it).

5.1 At the studies level

This approach must be used beginning with the studies planning whether it is organized by an international organization (ex. UNESCO), multinational (ex. ACCT) or national (ex. CET), whether it is attempting bi or multinational exchanges, these studies must make it possible to determine what is expected of the mechanism by the future participants (information, production help, material exchanges, pooling of ideas, research, distribution networks, production capabilities, etc.) and to determine up to what point they are willing to go (in the investment, in the operating costs, in the reorientation of their proper system and institutions, etc.) to determine in function of what these states or agencies do and are - the type of mechanisms that would be acceptable to all. Questionnaires, analytical tables (see, for example, the one made for the Data Bank Project of Eastern Europe, appendix 20), seminars, regrouping the technicians and also people having real decision-making power, will be necessary.

5.2 At the operational level

At the operational level, the first point will obviously be to determine at which time it becomes interesting to constitute a multinational mechanism of exchange of educational A.V.M.'S.

If the existing margin of cooperation between futur participants and what they are ready to perform together is too weak, then it could be useful to decide to abandon or put off the project of an exchange mechanism.

Next comes the problem of choosing the type of exchange organism to be created (institutional and functional criterias), this, in function of the analysis of objectives as arrived at by means of preliminary studies. We have proposed four models of exchange mechanisms (see section 4.1).

- The model A (exchange organism only taking care of cataloguing existing A.V.M.'s) fills an objective of information and requires that the members have the possibility of obtaining the A.V.M.'s themselves from the different producers.
- The model B (stocking and distributing the A.V.M.'s) assumes from the members a common desire of pooling together the A.V.M.'s which they produce or buy. An organism with a common source of A.V.M.'s is thus set up.
- The model C (the exchange organism takes care of medium transfers problems and adaptations of A.V.M.'s) requires heavy investments. It is then necessary that all the members determine their policies toward audio-visual matters together and that their choices (type of material in particular) are compatible.
- The model D (exchanges of A.V.M.'s at the production level) fills an objective of a pooling (or common creation) of production tools and require a community of ideas and a very tight collaboration between the members.
- These four models are not intransitive : they lend themselves to many adaptations and intermediary models : but mostly, at least certain ones among them, could be transitional models : an exchange organism which limits itself to providing information, could make it possible for the member organisms or countries to become used to working together, allowing them to better know each other in the light of an eventual cooperation at the production level, for example (see section 3.3.1.).
- Other "strategies" of setting up exchange organisms are yet to be envisaged :

- If the members of the future exchange organism have different institutional structures (private, public, for example) or have never collaborated together, an information exchange mechanism (model A) or the constitution of a collection of references in which each member makes available to the others his best productions, could make it possible to find a working method which overshadows their differences and creates habits of cooperation.
- On the other hand, an organism which groups AVM producers, of whom some have recently had the occasion of working together, could lean on these productions to disclose them, make them known and thus enlarge this collaboration while organizing it (see, in particular, the example of ACCT, section 2.5.2.)
- This "strategy" could also be applied to the type of A.V.M.'s or to the field covered by the materials exchanged. We could, for example, begin by putting into circulation one type of material (16m/m films for example, technical education or even a precise area within this field).
- All of these "strategies" have this in common : putting together a very heavy mechanism from the start always carries with it a very heavy risk of failure- better start by institutionalizing already existing exchanges or those ready to exist and amplifying them progressively as the needs and desire of cooperation evolve.

7 - BIBLIOGRAPHICAL SUMMARY

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