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POSSIBLE INTERNATIONAL INSTRUMENT CONCERNING
THE SAFEGUARDING AND PRESERVATION OF MOVING IMAGES

SUMMARY

In accordance with Article 3 of the "Rules of Procedure concerning Recommendations to Member States and International Conventions" covered by the terms of Article IV, paragraph 4, of the Constitution, the Director-General hereby submits to the Executive Board a preliminary study on the technical and legal aspects of an international instrument concerning the safeguarding and preservation of moving images, in order to enable the Executive Board to decide whether this question should be included in the provisional agenda of the twentieth session of the General Conference.

Decision required: paragraph 7.

1. The General Conference adopted at its eighteenth session resolution 3.422 by which it invited the Director-General to study, during 1977-1978, "the desirability of establishing an international instrument to protect moving images from being destroyed".
2. It is stipulated in Article 2 of the "Rules of Procedure concerning Recommendations to Member States and International Conventions covered by the terms of Article IV, paragraph 4, of the Constitution" that the General Conference "shall make no decision on the desirability or on the substance of any proposal for the regulation of a particular question on an international basis by the adoption of an international convention or of a recommendation, unless the proposal has been specifically placed on the provisional agenda of the Conference in accordance with the Rules of Procedure". Article 3 of the same Rules of Procedure foresees that "No new proposal for the regulation on an international basis of any question.....shall be included in the provisional agenda of the General Conference unless:
 - (a) it is accompanied by a preliminary study of the technical and legal aspects of the problem under consideration; and
 - (b) it has first been examined by the Executive Board at least ninety days before the opening of the session of the General Conference".
3. In pursuance of resolution 3.422 and in accordance with the above-mentioned provisions, the Director-General hereby submits a preliminary study of the technical and legal aspects of safeguarding and preserving moving images. This study, which does not claim to be an exhaustive analysis of all the problems involved, takes, in particular, account of the conclusions reached at an informal consultation of experts and representatives of inter- and non-governmental organizations which the Director-General convened, in co-operation with the Yugoslav authorities, in Belgrade from 21 to 24 November 1977. It also draws on two working papers commissioned for that meeting, one prepared by Mr. H. Volkmann, Chairman, International Preservation Commission of the International Federation of Film Archives on the technical aspects of preserving moving images, and the other by Dr. G. Straschnov, former Legal Director, European Broadcasting Union, on the legal aspects.
4. The Executive Board is invited to decide whether to include in the provisional agenda of the twentieth session of the General Conference an item concerning the desirability of adopting an international instrument concerning the safeguarding and preservation of moving images.
5. It will be recalled that, as foreseen by the above-mentioned Rules of Procedure:
 - (a) it is for the General Conference to decide whether the question should be regulated at the international level and, if so, to determine to what extent and by what method it can be regulated (Article 6); and
 - (b) since no instrument can be adopted before the ordinary session following that at which the above-mentioned decisions are taken (Article 9), an international instrument regulating this question cannot be adopted before the twenty-first session of the General Conference (1980).
6. Should the Executive Board decide to include the question in the provisional agenda of the twentieth session of the General Conference, the Director-General will, in accordance with Article 5 of the above-mentioned Rules of Procedure, communicate to Member States, at least seventy days before the opening of the session, a copy of the preliminary study, together with the Executive Board's observations and decisions thereon.

7. The Executive Board may wish to adopt the following draft resolution:

"The Executive Board,

1. Considering Article 2 and 3 of the Rules of Procedure concerning Recommendations to Member States and International Conventions covered by the terms of Article IV, paragraph 4, of the Constitution,
2. Having examined the preliminary study contained in document 104 EX/21,
3. Decides to include the following item in the provisional agenda of the twentieth session of the General Conference:

Desirability of adopting an international instrument on the safeguarding and preservation of moving images."

ANNEX

PRELIMINARY STUDY ON
THE TECHNICAL AND LEGAL ASPECTS OF AN INTERNATIONAL INSTRUMENT
CONCERNING THE SAFEGUARDING AND PRESERVATION OF MOVING IMAGES

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IntroductionA. The problem

1. The present study is concerned with the preservation of original works conceived and produced in the form of moving images. The term "moving images" is defined, for the purposes of this study, as recordings of motion pictures, with or without accompanying sound, on cinematograph film, videograms (video-tapes or video-discs) or on any other support medium at present known or which may be invented.
2. Moving images play an increasingly important role in recording historic events, cultural activities, scientific data and certain other aspects of our times that cannot be recorded in any other way with the same degree of accuracy. Their significance is particularly evident for those countries with prevalently oral traditions where moving images, together with sound recordings, constitute the only adequate means of preserving their culture - their folklore, customs and way of life which form an essential part of their cultural identity. It is thus now recognized that films and videograms form an important part of a nation's cultural heritage and from this recognition stems the desire to protect this heritage from the deprivations of time so that future generations may learn of the history and culture of their forebears.
3. However, due to the physical properties of the material in which moving images are embodied, their safeguarding and preservation give rise to a number of problems of a technical nature which cannot be ignored in the present context. These problems relate to the feasibility of preserving on a long-term basis the various support media at present in use, which are subject to a continuous process of deterioration, and to the storage conditions under which they should be maintained in order to extend their life-span as far as is possible.
4. There are, in addition, a number of legal and administrative aspects that are to be considered if the preservation of moving images is to be undertaken in a systematic way. The responsibility for preserving material is a matter that has to be determined. Furthermore, it may be considered desirable to institute some means whereby the body or bodies so designated may systematically acquire moving images for preservation purposes. Such a proposal, together with any proposed use of material deposited, has to be considered in relation to the ownership rights in the material.
5. It is thus evident that the necessary technical, legal and administrative measures for preserving that part of a nation's cultural heritage constituted by moving images should be taken at the national level. Some States have indeed established official archives for films and, in some cases, for videograms, copies of which are received by some archives under a legal deposit system introduced at the national level. Institutions in some countries are provided with resources that enable them to preserve at least part of their country's heritage under good technical conditions. Unfortunately, this is not the case in all countries. In some, the preservation of films has been left in the hands of private individuals and groups. Similarly, some broadcasting organizations have established television archives, but only selected recordings have been preserved, the main criteria being their value for use in future programmes of the organizations - it is estimated that only 5 per cent of the total amount of television programmes produced in one of the large industrialized countries since 1948 have been consciously preserved. The result of this situation has been that many precious records have been lost, either through deterioration, or by accident, or because they have been destroyed, for instance, for reuse of the support medium.

B. Efforts made at the international level

6. While it is primarily at the national level that the technical and legal problems relating to the preservation of moving images can best be solved, this should not preclude international co-operation for this purpose. In fact, a number of organizations are actively engaged, at the international level, in the promotion of research and the exchange of information in this field.
7. The preservation of films has been one of the major concerns for many years of the International Federation of Film Archives (FIAPF), a non-governmental organization which groups some fifty film archives throughout the world. This Federation, originally formed in 1939, has been active in promoting the preservation of films as art and historical documents and has prepared several technical manuals on various aspects of film preservation. The International Federation of Television Archives (FIAT), established in 1977, is embarking on a similar programme with respect to television recordings.
8. Other non-governmental organizations have also been involved in related fields. The International Film and Television Council (IFTC), of which 38 organizations with activities relating to the cinema, broadcasting and other audio and audio-visual communication media, are members, has formed a special commission on the preservation of moving images; in addition, the Cataloguing Commission of the Council has undertaken, on behalf of Unesco, a study on the cataloguing of audio-visual material, the results of which will be available during the course of 1978. Research into the technical aspects of storing magnetic tapes and cinematograph film has been undertaken by the European Broadcasting Union. The International Council of Archives has been instrumental in drawing attention to the value of moving images as historical records.
9. Unesco's concern for the preservation of moving images should be viewed within the framework of its activities for the protection of the movable cultural heritage of mankind. Thus, the Convention on the means of prohibiting and preventing the illicit import, export and transfer of ownership of cultural property (1970) refers specifically (Article 1, j) to "archives, including sound, photographic and cinematographic archives" which States Parties to the Convention undertake to protect from the dangers of illegal trade. Unesco has also been associated with the establishment of archives of moving image documents in several developing countries and is co-operating with national film archives in organizing training courses for film archivists. In addition, the feasibility of setting up a documentation centre on moving images in co-operation with the IFTC will be explored.

I. TECHNICAL ASPECTS OF PRESERVING MOVING IMAGES

10. The preservation of moving images gives rise to a number of technical problems which vary with the type of support medium used. These will be briefly reviewed in the following paragraphs. The present section also includes recommendations relating to the storage of moving images.

A. Physical properties of the different support media

(i) Cinematograph film

11. Cinematograph film is composed of various layers, namely a base (nitrate, acetate or polyester), an adhesive layer and either a black-and-white emulsion or several colour and filter layers. All film is highly sensitive to changes in temperature and humidity, it shrinks when humidity falls below a certain level and the various layers expand at different rates if the film is exposed to variations in temperature. The extent to which the quality of the image recorded on film can be maintained will depend primarily on the base and on the emulsion.

(a) The base- Nitrate base

12. The original negatives of all old silent films have a nitrate base, as do all sound films, both black-and-white and colour, that were produced before 1950, as well as all copies made before that date. The base of nitrate film consists of nitro-cellulose. It decomposes, releases gases and is highly inflammable (old film may ignite spontaneously at 41°C) and must therefore be stored in a cool and fire-proof place. The numerous fires in film archives, which have resulted in the loss of valuable and irreplaceable films, can be attributed for the most part to the spontaneous combustion of nitrate material.

13. On the basis of experiments carried out, and more especially in the USSR, it is recommended that nitrate film should be stored at a temperature of $+4^{\circ}\text{C} \pm 2^{\circ}$ and with a relative humidity of 50 per cent \pm 10 per cent. It is of critical importance that these conditions are kept constant and that nitric gases are eliminated, as soon as they are released, by appropriate ventilation. Such conditions can only be achieved by a system of air-conditioning. The nitric gases released also have a destructive effect on acetate film and for this reason, nitrate film should never be stored with acetate film.

14. Many large archival institutions still retain significant collections of nitrate film. For long-term preservation and until such time as technology has discovered a means of preserving nitrate film in complete safety, these should be transferred to tri-acetate at the earliest opportunity. However, as long as the original nitrate film remains of better quality than the copies on tri-acetate, the original should be retained, provided that safe, adequate, storage conditions are available. No nitrate film should be destroyed until it has been properly identified and analysed.

- Acetate base (safety film)

15. In most countries, the transition from nitrate to acetate film took place in the fifties. It can therefore be assumed that as from the mid-fifties all negatives produced and duplicates and copies made have an acetate base (acetyl cellulose), which for more than 20 years has commonly been of tri-acetate. Tri-acetate base has a much higher combustion temperature than nitrate film, is no more inflammable than paper and gives off no harmful gases. However, plasticizers escape when the air is too dry and air pressure is low, and the film will then shrink and become brittle. When humidity is too great, the plasticizer crystallizes out. The tri-acetate base is, nevertheless, more stable than the nitrate base and easier to conserve.

16. Recommended storage conditions for all safety film are: maximum temperature of 12°C and relative humidity of 50 per cent \pm 10 per cent which should be kept constant. It is estimated that acetate film can be preserved under such conditions for between 50 and 100 years.

- Polyester base

17. Polyester is insensitive to fluctuations in temperatures and humidity. It is not inflammable, releases no harmful gases and it is not affected by fungus or bacteria. It would be the ideal material for a film base, were it not for the considerable difficulty in fixing thereon the light-sensitive emulsion, which increases with the width of the film strip. For this reason, Super 8 film is the only film on polyester base at present in general use, although limited quantities of 16 mm polyester film are also manufactured for special purposes. Polyester film can readily be stored under the same conditions as tri-acetate film; because of the emulsion, air-conditioning is necessary.

(b) The emulsion

18. The emulsion is a light-sensitive layer which is fixed to the base by means of a binding layer. It consists of gelatine, in which finely scattered micro-crystalline light-sensitive substances are suspended. Fungus and bacteria feed on gelatine, and are certain to attack it when humidity and temperatures are high. Even under the most favourable conditions (i.e. with a maximum relative humidity rH 60 per cent), damage from fungus and bacteria can still occur.

- Black-and-white film

19. Suspended in the gelatine of black-and-white film are light sensitive elements known as silver halogenides, which produce the black silver image. If exposed to acids (industrial waste gases, nitric gases, residues after treatment, etc.) the silver image will fade. Such damage can be repaired, but this requires not only specialized development equipment but also skilled staff. The storage conditions for black-and-white film are determined by the base.

- Colour film

20. At present, 90 per cent of all films made in the large film-producing countries are in colour. Unfortunately, however, colour film is the most difficult of all audio-visual media to preserve. Not only do the original colours bleach and fade, but new colours (mainly yellows and browns) appear spontaneously on the film. The life-span of colour film can be prolonged by the following processes:

by freezing to -5° with maximum relative humidity of 20-30 per cent;

by making three colour separations on black and white film; and

by replacing the dyes in film by colour symbols (television-technique) which is considered to be the best method of retaining colour.

By using one of these processes, each of which are very onerous and expensive, the experts consider that colour film can be preserved until new support media are fully developed.

(ii) Video-tape

21. Under the video method, the images and sound are recorded on an audio-visual tape or disc by means of a magnetic, mechanical or electronic device and are projected by the use of a television set. Magnetic video-tape has been used by television broadcasting organizations for recording and storing moving images for many years. The main disadvantage presented by this support medium is that magnetic fields in the vicinity of the stored tapes can alter the position of the magnetizable particles on the tape and thus damage the recordings. In addition, after each recording, some background noise is evident and a "print-through" effect is obtained.

22. Scientists consider that recordings on video-tape could, in principle, be preserved for a hundred years or even longer. However, there is as yet no experience of preserving image on video-tape on a long-term basis. Most film archives transfer moving images they receive on video-tape onto film, not only because they are not equipped to deal with video-tape but also because no accurate predictions on its preservation qualities exist.

(iii) New technological developments

23. It is expected that new techniques which are currently being developed will permit moving images to be preserved on a very long-term basis, at greatly reduced cost and with far less space requirements. Two systems, in particular,

display characteristics which would seem to make them more suitable for this purpose than methods used so far. They are:

- the holographic process; and
- the video-disc.

24. Under both systems, light and colour are not stored in the form of silver or dye particles but as coded signals, and they therefore do not present the disadvantages of films. Another advantage is that the recordings can be permanently fixed and thus cannot be altered by magnetic influences. These support media are far more durable than optical film: the master matrices of the video-disc, for example, are made from such materials as non-corroding metals and glass, and could therefore be conserved for centuries if kept at a constant temperature.

B. Recommendations for storing moving images

25. It should be stated from the outset that the cost involved in preserving moving images by methods at present used is very high indeed, not only the initial investment required for the construction of appropriate premises, but also the staff, equipment and maintenance.

26. Due to the different properties of the support media, three types of vaults are required for the storage of moving images:

vaults for nitrate film: these vaults should be kept at a constant temperature of $+ 4^{\circ} \text{C} \pm 2^{\circ}$ and relative humidity of 50 per cent ± 10 per cent. Their maximum capacity should be 100 tons. Adequate precautions should be taken against fire: sufficient space should be left between vaults which should be constructed at a safe distance from other buildings. The film cans should be stored in insulated metal cabinets;

vaults for black-and-white acetate film, polyester film and video-tapes: these should be air-conditioned to a maximum of 12°C and maximum relative humidity of 60 per cent. No special precautions against fire, other than those normally taken in a library, are required;

vaults for colour film: these vaults should have a maximum temperature of -5°C and maximum relative humidity of 30 per cent. It is extremely important to insulate the foundations, or, in the case of underground vaults, the external walls and the roofs.

27. For safety reasons, original material, such as original negatives, and copies must be stored in separate vaults. It is therefore recommended that two of each type of vault be constructed and original negatives (or dupes) and copies of every important film stored separately. A similar practice should be adopted for all other moving images.

28. Experiments carried out would seem to indicate that video-discs and, very probably, holographs, could be preserved on a long-term basis at room temperature, provided this is kept constant. The cost involved would thus be considerably reduced.

29. All the holdings of moving images should be regularly inspected. Nitrate film should be inspected annually, except where the results of the artificial ageing test indicate the necessity of testing at more frequent intervals. All other types of material should be inspected every two to five years, depending on their age. At the same time, the material should be cleaned free of dust and dirt. It is also necessary for all the holdings to be registered and catalogued.

II. LEGAL AND ADMINISTRATIVE ASPECTS OF PRESERVING MOVING IMAGES

30. The preservation of moving images has given rise to a number of issues and problems, of a legal and administrative nature, and it would appear that at this stage few countries have found solutions that are satisfactory to all the different groups concerned. Most of the issues are related to (A) the ownership of rights, (B) responsibility for preservation (legal deposit) and (C) reproduction and accessibility. These will be briefly discussed in the following paragraphs.

A. Ownership of rights in moving images

31. It is clearly impossible to take effective measures for safeguarding and preserving moving images without the collaboration, whether it be voluntary or compulsory, of the owner of the material who is, in the majority of cases, the producer.⁽¹⁾ The position of the producer with respect to preservation depends on the one hand on national copyright legislation, in which are reflected the provisions of international copyright legislation, and on the contracts concluded with authors. It would thus seem appropriate to review, in the first instance, the main international copyright conventions and to proceed with an examination of the way in which national copyright laws determine the ownership of rights.

(i) Provisions in international copyright legislation

32. The Universal Copyright Convention, as revised on 24 July 1971, mentions cinematographic works only in Article 1, stipulating that "Each Contracting State undertakes to provide for the adequate and effective protection of the rights of authors and other copyright proprietors in... cinematographic works". The Convention makes no express mention of other forms of moving images. No article refers either explicitly or implicitly to the preservation of cinematographic works and there is no provision in the Convention that would prevent Contracting States from preserving such works.

33. The Berne Convention for the Protection of Literary and Artistic Works (hereinafter referred to as the "Berne Convention") is more explicit as regards the copyright in cinematographic works. The Paris Act of 24 July 1971 stipulates in paragraph 2(a) of Article 14 bis that "ownership of copyright in a cinematographic work shall be a matter for legislation in the country where protection is claimed". It is interesting to note that according to Article 15, paragraph 2, it is the person or body whose name appears on a cinematographic work who shall be presumed to be the maker, in the absence of proof to the contrary.

34. With respect to other forms of moving images, the Berne Convention foresees the possibility of future technological developments and thus mentions, in the list of protected works, "cinematographic works to which are assimilated works expressed by a process analogous to cinematography". The Contracting States are free to interpret this expression as they wish, although the assimilation of videograms to cinematographic works seems to be the approach adopted by many countries.

(ii) Provisions in national legislation

35. As mentioned above, ownership of copyright in a cinematographic work - and also of videograms as far as they are assimilated to cinematographic works - is to be defined by national legislation. Countries have adopted different systems whereby ownership of rights in cinematographic works is determined:

(1) The term "producer" used in the English text for easy comprehension denotes the "maker" of all forms of moving images, which is the term adopted in international copyright legislation.

- (i) the film-copyright system which attributes copyright to the producer, on condition that he acquire by contract all the rights necessary to make the film, including rights relating to pre-existing works and to direct contributions to the film itself - such as the dialogue, music, etc.;
- (ii) in countries where the copyright law is based on the philosophy of the French law, copyright is attributed to all the persons who have made an original contribution to the film (called "co-authors"). However, the co-authors usually transfer exploitation rights to the producer for a period of five to ten years;
- (iii) some countries have adopted a legal transfer system, under which legislation, while it does not determine who are the co-authors of cinematographic works, stipulates that the contracts concluded between the authors and the producer must provide for the transfer of exploitation rights to the producer.

From an analysis undertaken of some 60 national legislations, it would appear that the film copyright system which attributes copyright to the producer is the most widespread.

36. However, this does not dispense with the need for the producer to conclude contracts, since he cannot use a protected work for making a film without the author's consent. It follows that except under the legal transfer system which is relatively rare and under the system prevailing in certain countries where the film is made by a State institution which then owns the film, the contracts between the author(s) and the producer can limit the exploitation period and go as far as obliging the producer to destroy the film and all copies thereof. Such a provision is sometimes included in these contracts to permit the author to re-use his original contribution, for instance, the scenario, for a new film, known as a "remake".

37. So far as television broadcasts are concerned, the originating organization is the owner of any rights in the broadcast, but it must take into account the rights of the contributors to a given programme, i.e. of the authors, composers, performers, etc.

B. Responsibility for preservation

38. In most countries, a legal deposit system has been introduced with respect to material published in the country. It would seem that the only effective way of ensuring that all nationally produced moving images are preserved would be if such a system were applied to moving images. Several countries have instituted a legal deposit system for films and, more rarely, for other forms of moving images. It is proposed to start this section with a brief review of these national legislations before discussing the different issues raised by the introduction of legal deposit.

(i) Brief review of provisions in national legislations

39. It is extremely rare that national copyright laws include provisions relating to the deposit of a film, although in some cases, deposit is a prerequisite if legal proceedings are undertaken. However, where deposit is foreseen, in almost all cases, deposit is limited to the title of the film, a summary of the subject-matter or the scenario, in some cases, photographs of the main scenes, and in others, the musical work.

40. The provisions of national legislations - other than copyright legislation - relating to the deposit of moving images vary considerably from country to country, as may be illustrated by the following examples. In Algeria, a positive copy of all films produced or co-produced in the country must be deposited in the archives of the Cinemathèque by the producer or the distributor. In France, one negative or one standard positive copy of films produced or co-produced must be deposited at the Bibliothèque nationale by the producer within a period of two years as from the date on which exploitation starts, and a copy of other audio-visual works must be deposited before exploitation begins. Legislation in Italy stipulates the legal deposit of feature films, short films and newsreels, under the responsibility of the producer; the Cinemathèque can use the copies it receives and those that it is authorized to make at its own expense for cultural and educational purposes five years after the deposit of the film. In the USSR, a decree foresees the mandatory deposit of films made in the country, or abroad if they have been projected in the country, by the reproduction laboratories; material must be deposited in the State Film Archive within two months after reproduction for exploitation and export has been completed.

41. A number of countries have made special arrangements for ephemeral recordings, i.e. recordings made by broadcasting organizations for their own use. In most cases, the preservation of ephemeral recordings of exceptional documentary value is stipulated by law, and the archives of the broadcasting organization are the legal depositories for these documents. It should also be noted that the only international regulation directly relating to the preservation of moving images concerns ephemeral recordings. Article 11 bis of the Paris Act of the Berne Convention provides that national law may authorize broadcasting organizations to make ephemeral recordings by means of their own facilities and for their own broadcasts, without the consent of the author, and to preserve these recordings in official archives, "on the grounds of their exceptional documentary character".

(ii) The introduction of a legal deposit system

42. The following paragraphs discuss several questions that are raised by the introduction of a legal deposit system for moving images which could form part of the recommendations formulated in an international instrument on the preservation of moving images. These questions relate to the precise object to be deposited, the cost involved, the time factor and the administrative infrastructure.

43. With respect to the object of deposit, it would seem desirable to foresee that a copy of all moving images should be deposited, by the producer, not only of cinematographic films (including feature films, documentaries and newsreels) but also of all videograms (that is, video-cassettes and video-discs which are on sale or on hire to the public) and of all television recordings made by television organizations and by private producers. Exception could be made for films produced privately by individuals for their own use; films made by private societies, such as explorer societies, could fall into this category. It would not seem realistic to foresee that films other than those made by national producers or those co-produced with foreign producers should be deposited. If this restriction were not introduced, this would imply that a copy of each film shown in a country, either at the cinema or on television should be deposited in that country. It is difficult to imagine, given the world-wide distribution of certain films, the number of copies this would entail, not to speak of the cost of the operation. Legal deposit should therefore be restricted to moving images produced or co-produced by a producer whose place of residence or headquarters is in the country requiring legal deposit.

44. As to the type of copy to be deposited, there would be obvious advantages if film producers could be encouraged to deposit their original negative material. However, given the situations prevailing in different countries, it would seem

difficult to formulate a general principle on this question. The copy deposited should, however, be of good quality. In cases where the producers do deposit their original material, some form of controlled access should be made available to them for printing purposes.

45. The question of who should be responsible for the cost of the copy to be deposited is a very delicate one indeed and one on which opinions vary. There are those who believe that the cost should be met by the producer who could include this expense in his production budget, on the basis of which, in many cases, subsidies or government loans are obtained. Others consider that, in view of the high cost of making a copy (approximately \$2,000 for a positive copy) the State should meet the costs involved. Also to be considered are the amateur producers and the producers of avant-garde films where the proceeds from the box-office are often insufficient to cover production costs; it would be extremely difficult for these producers to meet the additional cost of providing a copy for deposit.
46. A further aspect to be considered is the time allowed to the producer for the deposit of the copy. In principle there would seem to be no reason to delay the deposit and it could therefore be foreseen that a copy of a film should be deposited on completion of the standard copy and of a television recording immediately after the recording has been transmitted. However, in cases where national legislation determines that the cost of providing the copy for deposit should lie with the producer, it might be necessary to allow the producer a certain delay in depositing the material; this delay should in no case be longer than two years.
47. With respect to the institution that should receive moving images subject to legal deposit, it may be argued that it is necessary to permit several institutions to hold the material, if only because of the volume involved. Furthermore, television organizations need to have immediate access to their own archival material, which would be extremely difficult if this material were held on different premises, for instance, in the same location as cinematographic films. As has been noted, in the majority of cases where ephemeral recordings are authorized, those of an exceptional documentary character are normally preserved in the archives of the broadcasting organizations.
48. However, an unsatisfactory situation obtains in several countries where a multiplicity of institutions, both governmental, semi-private and private, hold moving images without any clear definition of their respective mandates, without adequate resources for preserving material under good conditions and with little control exercised on the conditions under which material is held or on the use made thereof.
49. It might therefore be appropriate to foresee that moving images should be deposited with one central agency officially designated in each country for that purpose; it could subsequently be determined, either by national legislation or by that central agency, which institutions should actually hold the material, on the understanding that any institutions thus designated should be provided with the necessary resources to enable them to preserve the material under good conditions. These institutions would together form the "official archives" of the country concerned for moving image material.
50. In resolution 3.422, adopted at its eighteenth session, the General Conference recommends that Member States should "proceed forthwith to take... legal and technical measures to salvage and conserve moving images of value". Everyone will agree that the notion of value is very subjective. Material that is considered without value today may become priceless in later years. The difficult problem of selecting moving images to be preserved thus arises, and particularly the

question as to whether selection should take place at all and, if so, by whom. It may be argued that it is illogical to introduce a system of legal deposit and to foresee at the same time that part of the material deposited may be eliminated. It is certainly wasteful to provide that an additional copy of audio-visual material should be made, at great expense either to the State or to the producer, and to provide for the possibility of not retaining it for preservation. Furthermore, criteria for selecting material will invariably be subjective and liable to change, if only for reasons of taste, policy or historical developments.

51. On the other hand, it is impossible to disregard the practical considerations of space and cost and it is these practical considerations that have led archives, even those endowed with important resources, to select, on the basis of the broadest possible consensus of informed opinion, material to be preserved.

52. It might be considered by some that a distinction should be made between cinematographic films and television films. The largest number of cine films annually produced in any country rarely exceeds 450 and it might be argued that it should be possible to retain this number; on the other hand television recordings are far more numerous, and are, in some cases, repetitive - sports, panel games, for instance. It is unfortunately, however, not possible to make such a distinction, since more and more frequently, films are being made both for the cinema and for television.

53. It may be that the preservation of all material should be a long-term objective and that the principle of no selection should be adopted. This may be made possible if advances in technology produce more economical systems which would permit the storage of material at very reduced cost and with far less space requirements. It would seem necessary to foresee some form of selection process, until new techniques permitting the preservation of all material have been discovered. Some provision should possibly be made at the national level to involve in any such selection process representatives of the authors and the producers who, it would seem, reject selection on principle, fearing that any choice made by archives would be arbitrary in nature.

C. The purposes for which moving images are preserved

54. Clearly the preservation of moving images under good conditions cannot be an end in itself. It is understandable that students of history, research workers, actors, writers and producers and special groups such as film clubs, wish to have access to film and similar documents that are of particular interest to them. It is, however, equally understandable that the owners of rights and notably the producers, who have invested considerable resources in the production of moving images, seek to restrict as far as possible any access made available free of charge. This attitude is not merely dictated by commercial interest. It may be recalled that all moving images are produced on the basis of contracts or, in the case of ephemeral recordings, under restricted legal conditions - which may limit their use, the duration of commercial exploitation and, in some cases, foresee the destruction of the material at the end of a fixed exploitation period.

55. It is questionable whether countries would wish to reduce the contractual freedom of authors, and to provide, for instance, that on expiry of the contractual exploitation period, moving images could not only be placed in archives but, in addition, be used for further public showings or for exchange purposes with other archives. Therefore, if an international instrument concerning the preservation of moving images is to be prepared, it should set out limits relating to the purposes for which the material preserved may be used.

56. It might be useful to quote in this connection the provisions of the Berne Convention that relate to the reproduction and communication of works protected by copyright and which are reflected in national legislations of States Parties thereto.
57. On the subject of the reproduction of literary and artistic works protected by the Berne Convention, Article 9 states: "It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author". Some latitude is thus left to national legislation on the question of reproduction, Article 11 of the same Convention stipulates with respect to communication that "Authors... shall enjoy the exclusive rights of authorizing: ... (ii) any communication to the public of the performance of their works". In this respect, national legislations are free to interpret "communication to the public" and to determine the extent of private use that may be made of works. It is essential that any new international legal instrument that has implications on copyright should respect the above-mentioned provisions.
58. From an archival point of view, it is necessary to hold all materials in two copies, that is, one for preservation purposes and the other for consultation or viewing. This implies that, if one copy only is deposited, the archive would need to make an additional copy. Furthermore, when the viewing copy deteriorates in quality, a further viewing copy has to be made from the preservation copy, so that one viewing copy of good quality is available at all times. In addition, archives consider it indispensable, in order to safeguard the original material, to make master material, called "an intermediate element". Clearly, therefore, official archives cannot function properly without the right to (limited) reproduction.
59. With respect to the communication of material deposited, it is understandable that official archives seek to make available, on their own premises, films that are not being shown on the commercial network. Given the restrictions of copyright laws, such projections should be of a private nature. It is interesting to note, in this respect, the differences in interpretation among national legislations of the term "private use"; under French law, for instance, this is interpreted as referring exclusively to the restricted family circle, whereas, under other legislations, this notion is extended to cover private clubs. It would not seem sufficient, in determining what entails a private projection, to foresee that no entrance fee is levied; the size of the audience is also to be taken into consideration and should be strictly limited. Official archives could, therefore, be permitted, subject to national legislation, to project material deposited for teaching or research purposes within their premises to a limited audience admitted free of charge, provided that the projection does not conflict with the commercial exploitation of the material.
60. For other uses, including exchanges between film archives, loans to film clubs, etc. the consent of the copyright owner would continue to be necessary.
- D. Outline of recommended legal and administrative measures
61. Set out below is a series of principles that could govern the proposed system for preserving moving images. These principles, which were formulated at the informal consultation of experts and representatives of organizations held in Belgrade from 21 to 24 November 1977, could be incorporated into an international instrument on the safeguarding and preservation of moving images:
- (a) Any sequence of moving images, whatever its purpose, physical characteristics, or its maker, subject to (e) below, should be deposited by the

- latter, in one copy, the nature of which should be determined by national legislation, with a Central Agency officially designated for this purpose. The depositor should have controlled access to this material if further printing is required. Any stipulation to the contrary which prevents such deposit should be null and void.
- (b) The national legislation should determine at whose cost the copy deposited would be made.
 - (c) The Central Agency referred to under (a) above should designate the appropriately equipped premises where the deposited sequences should be stored. These premises should together form the "official archives" for moving image documents of the country concerned and, so far as is reasonably possible, they should be provided with adequate resources to ensure proper safeguarding of all audio-visual documents deposited.
 - (d) In principle no sequence should be denied deposit and no selection should be made. However, for considerations solely of cost and space, national legislations may - until such time as emerging technology permits a more economical conservation in terms of cost and space of moving image documents - provide for exceptions to this general principle.
 - (e) The sequences referred to under (a) above are those made by a maker having his residence or headquarters in the country requiring legal deposit (national maker), irrespective of any co-production arrangement made with a foreign maker.
 - (f) In the case of cinematographic films the deposit should be made immediately after completion of the standard copy and in the case of television recordings immediately after the recording has been transmitted.
 - (g) Any archive referred to under (c) above may, subject to national copyright legislation:
 - (i) make, at its own expense, an intermediate element for the purpose of safeguarding the original material;
 - (ii) make, at its own expense, one single viewing copy and have the possibility of repeating this process if necessary, so that not more than one viewing copy of good quality is available at all times; and
 - (iii) project the copy for teaching or research purposes within its premises to a limited number of viewers admitted free of charge provided that the projection does not conflict with the commercial exploitation of the deposited document or with its showing on television.
 - (h) The copy deposited and the copies made therefrom should not be used for any other purposes without the consent of the owner(s) of the copyright in the document.
 - (j) Nothing in the preceding paragraphs should be construed as derogating from the national copyright legislation in force, and the legal deposit should not constitute a condition of copyright protection.
 - (k) Non-compliance with the requirement of legal deposit referred to in (a) above should be subject to sanctions to be determined by the legislation of the country where the deposit is required.

- (l) Purely private sequences of moving images made by an individual for its own use should be exempt from the deposit obligation.
- (m) The archives mentioned under (c) above should establish a catalogue of all moving image documents they hold, using uniform international standards to be defined, so that information understandable on a world-wide scale may be easily disseminated.
- (n) Detailed provisions regulating the deposit referred to in the preceding paragraphs should be a matter for national legislation.

III. SUPPLEMENTARY MEASURES

62. At the national level there is an urgent need to promote among all those concerned, the authors, the producers, the distributors, the broadcasting organizations and the public at large, appreciation of the value represented by moving images and awareness of the problems involved in their preservation. It is essential that measures be taken to this end by the mass media and with the assistance of public and private associations.
63. The lack of suitably trained staff has proved to be a handicap in many countries. It would seem appropriate for governments to encourage and support institutions that are able to provide appropriate training programmes which should cover as broad a range of methods and techniques as possible so that those trained may adapt themselves easily to new technology.
64. Research in fields related to the preservation of moving images is taking place under various programmes and with different objectives. Some mechanism should be established at the national level whereby such research could be co-ordinated and in addition be specifically directed towards the long-term preservation of moving images at a reasonable cost; the results of such research should be widely disseminated.
65. At the international level, States should co-operate with a view to preserving moving images which form part of the cultural heritage of mankind as a whole by exchanging information on methods and techniques for safeguarding the support media, and by combining their efforts in organizing international or regional training courses.
66. It would also seem essential that States should co-operate for the purpose of making available information on moving image recordings held in their official archives that relate to other States. Some countries have not always possessed - and some may not possess for some time to come - the necessary technology enabling them to record aspects of their history and culture, and they have had to rely on foreign producers for this purpose, with the result that such recordings are for the most part held abroad. Others have lost recordings of great relevance and direct interest to them due to accidents or as a result of armed conflict. States should therefore facilitate, by all possible means, the acquisition by the official archives of other States of a copy of moving image documents held by institutions in their territory and which relate to the history or culture of those States. The documents so supplied should be made available against reimbursement by the recipient body of the actual cost of making the copy and subject to any copyright which may exist in the document thus reproduced.

Conclusion

67. The investigations carried out by Unesco with respect to the safeguarding and preservation of moving images as at present undertaken at the national level indicate that some form of normative action on this question is desirable. It is in fact urgent that the attention of States be drawn to the necessity of taking adequate technical, legal and administrative measures to safeguard this part of their national heritage, to avoid the irretrievable loss of further records of unique value to future generations.
68. From the studies on the technical and legal aspects of preserving moving images which are briefly summarized in the preceding paragraphs of this document, it will be seen that further standard-setting action is feasible. It is now technically possible under good conditions to preserve for at least several decades the support media in which moving images are incorporated and it is expected that as a result of emerging technological developments, it will be possible to extend their preservation over far greater periods of time, at reduced cost and in less space. It is also feasible from the legal point of view to preserve the intellectual productions constituted by moving images provided that some system, such as legal deposit, is instituted by governments, thus ensuring that copies of all such productions are systematically deposited with a central official body.
69. The most appropriate form of such standard-setting action remains to be determined. As stipulated in Article IV, paragraph 4, of the Constitution and Article 6 of the Rules of Procedure concerning Recommendations to Member States and International Conventions covered by the terms of Article IV, paragraph 4, of the Constitution, this decision lies with the General Conference.
70. In accordance with the terms of the above-mentioned Article of the Constitution, the General Conference shall, in adopting proposals for submission to Member States, distinguish between recommendations and international conventions submitted for their approval. Whereas the purpose of international conventions is to establish rules that bind those Member States that have ratified or accepted them, recommendations are defined in Article 1, subparagraph (b) of the above-mentioned Rules of Procedure as instruments "in which the General Conference formulates principles and norms for the international regulation of any particular question and invites Member States to take whatever legislative or other steps may be required - in conformity with the constitutional practice of each State and the nature of the question under consideration - to apply the principles and norms aforesaid within their respective territories". It should be recalled that the adoption of an international convention by the General Conference calls for a two-thirds majority while a simple majority is necessary for the adoption of a recommendation.
71. In view of the nature of the question which has been described in this study, it would seem appropriate for the instrument regulating the safeguarding and preservation of moving images to take the form of a recommendation to Member States, thus leaving to them the choice of determining the specific measures to be adopted, in the particular conditions obtaining in their respective countries, in order to attain the objectives mentioned above in sections I, II and III of this study. It may be considered premature, at this stage, to prepare an international convention on this question; if such an instrument were, for instance, to refer to a legal deposit system for moving images, it is questionable, given the limited experience of the few countries that have instituted such a system, whether Member States would be in a position to ratify or accept in the next few years an international convention on this question.