



IFLA Audiovisual and Multimedia Section

GUIDELINES FOR AUDIOVISUAL AND MULTIMEDIA MATERIALS IN LIBRARIES AND OTHER INSTITUTIONS

March 2004

1. **Background**
 2. **General statements**
 3. **Scope of the guidelines**
 4. **Organization and administration**
 - **Staffing**
 - **Education and training**
 - **Budget**
 5. **Acquisition and legal deposit**
 6. **Copyright**
 7. **Cataloging and bibliographic access**
 8. **Archiving and storage**
 9. **Digitization and preservation**
 10. **Internet**
 11. **User services**
 12. **Cooperation**
 13. **Reference resources**
 14. **Indicative list of audiovisual carriers**
-

1. Background

This set of guidelines, for audiovisual and multimedia materials in libraries of all kinds and other appropriate institutions, is the product of many years of consultation and collaborative effort.

As early as 1972, The UNESCO Public Library Manifesto had stressed the need for audiovisual media in public libraries, both in adult and in children's services. The following year, a Round Table on Audiovisual Material was created within IFLA to cover all "non-book materials", or – according to another definition – all documents requiring equipment for their consultation.

In 1982, this Round Table was asked to consider standards for the provision of audiovisual materials and equipment in public libraries, and the first edition of the IFLA Guidelines was born. A second, revised, edition was planned for 1987, but this was never published.

The success of major new services in libraries, such as multimedia documents (CD-I and CD-ROM) and multimedia on-line services, represent an evolution of audiovisual documents since they deliver several different audiovisual media, electronically organized. The Round Table therefore changed its name in 1996 to the Round Table on Audiovisual and Multimedia. In 1999 the Round Table on AVM was transformed into the Audiovisual and Multimedia Section.

Indeed the technical revolution in libraries pointed to a need not only for an organizational name change but also for revision of the IFLA Guidelines. In 1997 the RT on AVM proposed a small project to revise the old texts and complementary material into a set of Guidelines for Audiovisual and Multimedia Services in Public Libraries. The one-year project concluded that creating new guidelines was a too heavy task for one person¹; but set out a framework for future work. In 1999 the Coordinating Board of IFLA Division VI sanctioned a further project, assigned to a team of members² of the new AVM Section, to prepare a set of guidelines for Audiovisual and Multimedia in all kinds of libraries and other institutions.

The scope of the project had been extended beyond Public Libraries in recognition that Information and Communications Technologies were breaking down traditional distinctions between Public, Academic, National and Special libraries as far as media handling and access were concerned. The team's work was nevertheless influenced by discussion at IFLA 2000 of the draft revised IFLA Guidelines for Public Libraries, some parts which relate to audiovisual and multimedia materials: "to bridge the gap between the information rich and the information poor it has also to provide access to the necessary equipment, e.g. information technology, microform readers, tape recorders, slide projectors and equipment for the visually handicapped."

The first draft of the present Guidelines was presented at a Workshop in 2001 at the IFLA Conference in Boston, and the team received a number of suggested improvements as a result. A second planned working meeting had to be postponed from the crowded program of IFLA 2002 Glasgow, and so the draft was published online on IFLANET, as well as being widely circulated to IFLA and other professional contacts for comment.

In July 2003, a second draft of the Guidelines, taking into account all comments received to date, was published in the AVMS Newsletter. The current version, based on that draft, was finalized by the rapporteurs³ of a workshop held in Berlin on 7 August as part of the IFLA 2003 Conference.

2. General statements

An ever-increasing amount of information – covering educational and recreational interests as well as information needs – is being produced in a wide range of audiovisual and electronic formats. Access to these materials should be as open and as free as access to print-based materials.

Audiovisual media are part of our cultural heritage, carrying a huge amount of information that needs to be preserved for future use. The rich variety of media expressions in society should be reflected in the services offered to users by the libraries.

Librarians, as information providers, should be concerned with the provision of information in the formats most suited to the differing needs of various types of user, each of which must be clearly differentiated. A library exists to serve its community and consequently the needs of all members of that community must be accommodated – the old and the young, the able and the disabled, the gifted and the backward members of the society.

Audiovisual materials can reach out to sections of the public for whom the traditional print-based materials have little impact, e.g. to those who are reluctant to use the printed word, and to those with visual and other handicaps.

In developing countries the provision of audiovisual materials and their associated equipment might be regarded as of greater importance than the printed word because the level of literacy is such that oral and visual expressions are essential for the purposes of communication.

The need for still images, films and sound on the more traditional non-electronic audiovisual carriers still exists alongside the growing possibilities of the Internet. Multimedia and computer based information have contributed to a great explosion of audiovisual materials in libraries. Almost every library user or visitor is a potential user of audiovisual and multimedia materials as well as of print.

Access to the Internet should be provided to users, free at the point of use. The library acts as an information navigator for people looking for access to new media, ensuring that they get reliable information.

¹ Bibbi Andersson (Sweden)

² Monika Cremer (Germany), Pierre-Yves Duchemin (France), Joelle Garcia (France), Marty Kesselmann (USA)

³ Bruce Royan (UK), Monika Cremer (Germany), Livia Borghetti (Italy), Kirsten Rydland (Norway), James Turner (Canada), Gregory Miura (France)

In no circumstances should audiovisual materials be regarded as additional luxury materials but rather they should be considered as necessary components in a fully integrated library service.

Libraries are in a hybrid situation, as they have to deal with all sorts of material, including print, audiovisual, electronic (including Internet) and multimedia. Librarians should be aware of the potential of audiovisual and multimedia formats as resource materials and include them in their collections. The range of audiovisual and multimedia materials acquired by a library must depend, as it does for printed materials, upon the needs of its users, upon the extent of its activities, and upon its particular responsibilities, for example in the area of formal education such as the provision of library services to schools.

3. Scope of the guidelines

In this paper the term audiovisual and multimedia will be used for contents of the collections of all types of library and information services regarding sound, images and multimedia⁴. All issues relating to sound, still and moving images, and multimedia documents and services (such as children's libraries and language centers), collection development, cataloguing, conservation, and access including Internet will be treated.

Definitions

Audiovisual

Pertaining to sight and/or sound.

Audiovisual materials

Any recorded sound and/or moving and/or still image items.

Multimedia

Containing two or more audiovisual expressions, e.g. sound and image, text and animated graphics.

Interactive Multimedia

Multimedia with the order and/or nature of its presentation under user control.

Carriers

Sound, still or moving images, and multimedia may exist in analogue and digital formats on a range of carriers. These Guidelines include an indicative list of carriers at Section 14.

4. Organization and administration

Staff

The management of audiovisual and multimedia resources requires specialist knowledge as well as equipment.

All librarians should be aware of the potential of audiovisual and multimedia and should regard the provision of materials and equipment as a normal aspect of library service. Responsibilities and functions concerning audiovisual and multimedia resources should be clearly defined within the organization of the library.

In big libraries there is certainly a need for dedicated librarians specifically trained to serve customers coming to separate Audiovisual and Multimedia departments. Even in smaller institutions there should be a member (or members) of the staff with specific responsibility to coordinate and advise on the provision of audiovisual and multimedia services. Wherever possible, they should be assisted by technical staff (whether in-house or external). Library staff will need some technical expertise, depending on the program at each library. Knowledge of media markets and products is needed, and increasingly, networking with other media libraries is possible and useful.

It is desirable for one institution in each country to take the lead in setting out best practice in the provision of audiovisual and multimedia materials and services.

Education and training

⁴ Microforms are not included in these guidelines.

Schools of librarianship and information science should ensure that all students are aware of the potential of audiovisual and multimedia in libraries. Optional courses for more detailed aspects should be provided for those wishing to specialize further.

Curricula should take into account the experiences of librarians and other specialists that already deal with such materials. The need for training in this field consists of three complementary and indissociable dimensions: intellectual, legal, and technical.

A few countries have training programs for librarians wishing to work specifically with audiovisual and multimedia in the library. In Australia, for example, the University of New South Wales, School of Information Systems, Technology and Management, offers education in the field of Audiovisual Management, while in the USA, the University of California Los Angeles offers a Masters in Moving Image Archive Studies. Some countries have education for music librarians and courses for librarians within the art field. Of course there is a lot of library education dedicated to information technology but it is focused more on computer work than work with more traditional audiovisual materials.

In the same way that it is important for a librarian to have knowledge about literature when working with books, it is important to have knowledge about films, art, music etc. when working with audiovisual material.

Continuing professional development is especially needed for media specialists since techniques and products are changing rapidly. It should be catered for in the programs of professional associations, schools of librarianship and information science, and other related organizations. Such programs may be organized internationally, nationally, regionally or locally.

Budget

A recognized budget for collection development, equipment, regular maintenance, storage, repair and replacements of hardware is necessary. This should be a defined percentage of the collection and equipment budget of the library, according to the size of the collections.

The budget process should be reviewed every year in response to the rapid changes in new technologies (an amortization rate of 5 years is much too long in this field).

5. Acquisition and legal deposit

All librarians, whatever their responsibilities are within a library, should be aware of the potential of audiovisual and multimedia formats as resource materials and include them in their collections development considerations.

The library's collection development policy should explicitly include media resources. It is necessary to establish priorities and selection criteria for these resources separately, and they may vary from format to format. These criteria can serve as a basis for collection development.

The typical channels of acquisition for print materials may not always be useful for these media. Specialist legal and market knowledge is needed, since this market is different from that for print. There is a similar need for specialist knowledge in the acquisition of appropriate equipment.

The distribution network, regional, national and international, is diverse and sometimes poorly organized. Libraries in this field should cooperate in determining a selected list of reliable distributors for each type of material.

It is good practice in many institutions to build a collection of locally created materials (including films, videocassettes, oral history recordings, and music). This is an excellent way of preserving such material and making it more widely available, so long as copyright considerations are taken into account.

One way of building collections of audiovisual and multimedia documents, and in particular rare and older materials, is by donation. It should however be borne in mind that uncertainties over intellectual property and other issues make this a less straightforward option than the acceptance of donations of printed material.

The diversity of Legal Deposit legislation and its application from country to country is immense, from non-existence to complete coverage of all materials, even sometimes to online materials. Similarly, the institution handling of such deposit varies, including national and regional libraries, specialist agencies, audiovisual and multimedia archives, university libraries and special libraries. Where legal deposit exists, there is a general need for promoting its benefits and its application.

The rights to access and use such deposited materials ought only be restricted if this is a legal requirement.

6. Copyright and Licensing

In the area of intellectual property rights, there are specific legal constraints in relation to sound and moving images. Quite apart from authors' or composers' copyright there are producers' rights and performers' rights, which relate specifically to audiovisual media, and the library community has a particular interest in rental rights. The legal position must be clearly established for every item in the collection.

Licensing questions are very important in this field. Because of the restrictions of licenses a register of the rights situation for each licensed item in the collection is recommended and this should be updated regularly.

Institutions should try to persuade publishers to accept a Model License Agreement (such as that sponsored by the Council on Library and the Information Resources and the Digital Library Foundation)⁵ to avoid the endless hard work of negotiations with a range of different kinds of publisher.

It may sometimes be appropriate to establish a separate, parallel, collection of items for which licenses have been obtained for more extensive use, for example home lending or public performance. Sometimes a time-limited use (rental collection) may be of interest for the library

Copyright and performance rights are normally not under the control of an individual library. The library must rely on national and international legislation and on organizations such as IFLA, IASA and EBLIDA, holding a watching brief on these matters. Institutions should look to their own library association as the first port of call for advice.

7. Cataloging and bibliographic access

Audiovisual and multimedia materials should be a natural part of a country's national bibliography.

Audiovisual and multimedia materials have characteristics that demand specialist cataloguing practices. Great efforts have been made by organizations like IFLA, FIAF, IASA and others to establish international cataloguing rules for them. Each library's cataloguing and bibliographic practices should support the choice of shared and recognized standards, and in the difficult work of indexing such materials, common rules for subject indexing should be used.

As a general rule these resources should be included in the general catalogue of the library to provide maximum information for the user. Nevertheless additional, differentiated "access points" for audiovisual and multimedia materials should be considered, and the catalogue entries should include technical information and information on the legal position for usage. In some cases, it may enhance user access to provide an additional, separate catalogue of the AVM collection itself.

Cataloguing rules:

The following list of international and some national cataloguing rules may be of assistance:

Anglo-American Cataloguing Rules. Prepared under the direction of the Joint Steering Committee for Revision of AACR, a committee of the American Library Association ... [et al]. 2nd ed., 2002 revision. Ottawa: Canadian Library Association, 2002. (loose-leaf) (Co-published by the Chartered Institute of Library and Information Professionals and the American Library Association)

Association Française de Normalisation. *Normes de catalogage. Domaine 164 : Documentation*
http://planete.afnor.fr/v3/espace_normalisation/programmesnormalisation/22-164.htm

⁵ <http://www.library.yale.edu/~llicense/modlic.shtml>

Association for Recorded Sound Collections. Associated Audio Archives. *Rules for Archival Cataloging of Sound Recordings*. Rev. [US]: ARSC, 1995. x, 60 p.

Deutsches Bibliotheksinstitut. *Regeln für die alphabetische Katalogisierung von Nichtbuchmaterialien [RAK-AV]*. Berlin : DBI. 1996

Die Deutsche Bibliothek: RAK-NBM-Präzisierungen. Frankfurt/M. 2001

ftp://ftp.ddb.de/pub/rak-nbm/Nbm_Praezisierungen.pdf

Die Deutsche Bibliothek. Arbeitsstelle für Standardisierung: Empfehlungen für „Continuing integrating resources“. Frankfurt/M. 2002.

ftp://ftp.ddb.de/pub/rak-nbm/Empfehlungen_CIR.pdf

Rules for Bibliographic Description [Russian Cataloguing Rules, RCR]. Moscow, 1986

Dirección General del Libro, Archivos y Bibliotecas. *REGLAS de Catalogación*, 1.a ed., 2.a reimpression con correcciones Madrid: 1988

Fédération Internationale des Archives du Film (FIAF). *The FIAF Cataloguing Rules for Film Archives*. Compiled and edited by Harriet W. Harrison for the FIAF Cataloguing Commission. München: K.G. Saur, 1991. xvi, 239 p.

American Library Association. *Guidelines for Bibliographic Description of Interactive Multimedia*. The Interactive Multimedia Guidelines Review Task Force, Laura Jizba ... [et al] Chicago: American Library Association, 1994. xi, 43 p.

International Association of Sound and Audiovisual Archives. *The IASA cataloguing rules : a manual for description of sound recordings and related audiovisual media*. IASA 1998.
<http://www.iasa-web.org/icat/>

International Federation of Library Associations and Institutions. *ISBD (NBM): International Standard Bibliographic Description for Non-Book Materials*. Recommended by the ISBD Review Committee, approved by the Standing Committee of the IFLA Section on Cataloguing. Revised ed. London: IFLA, 1987. vii, 74 p.

International Federation of Library Associations and Institutions. *ISBD (ER): International Standard Bibliographic Description for Electronic Resources*. Recommended by the ISBD (CF) Review Group. Revised from the ISBD (CF) International Standard Bibliographic Description for Computer Files. München: K.G. Saur, 1997. x, 109 p.

Functional Requirements of Bibliographic Records. Final report. München: Saur, 1998. (UBCIM Publications – N.S. Vol.19)
www.ifla.org/VII/s13/frbr/frbr.pdf

International Standards Organisation. 15706, *Information and documentation – International Standard Audivisual Number (ISAN)*. Geneva: ISO, 2002. v, 12 p.

8. Archiving and storage

As different types of libraries have very different obligations in this area (from national libraries, which store for eternity to smaller libraries which are only responsible for user service), the approach to archiving and storage in this document can only be general in nature.

To preserve the information placed in their care, the library must ensure the physical and chemical integrity of the original documents to ensure that, when replaying, digitizing or transferring, the signals can be retrieved in the same or better quality and integrity standard as when they were recorded.

Storage conditions for audiovisual and multimedia carriers require special attention. Dirt, dust, polluted air and excessive or changeable temperature and humidity can cause damage. The life expectancy of CDs and tapes depends directly on the temperature and humidity at which they are stored. The carriers should be stored

separately, according to their chemical type (eg magnetic tapes, 78 rpm, LPs, acetate discs, optical discs), in order to provide well-adapted temperature and humidity, as well as to facilitate extinguishing in case of fire. In addition, magnetic media – such as video and audiotape – should be kept away from magnetic fields.

The storage containers themselves vary in size and shape according to the diversity of the carriers, and this has implications for the organization of the storage area and the degree of integration that can be achieved with the storage of printed documents. It also affects the decision as to whether to store in open access or closed stacks.

For preservation purposes, any marking on the physical carriers must not affect the integrity of the resource itself. For example, the marking of CD or DVD using traditional inks or adhesives should be avoided. Two solutions exist, although neither has yet proved to be entirely reliable: special quick-drying ink or a laser engraver applied to the central blank area of the disc.

The level of degradation of the original carriers should be regularly surveyed in order to prevent irretrievable loss. For discs, this checking is mainly visual: its aim is to detect impacts, moisture, wear etc. For tapes, it is necessary to read the signal in order to detect demagnetization, dropouts, wow etc. For optical discs, a reader does not provide proper information on any loss as there is a degree of failsafe in their playback. They should be detected with an analyzer.

The storage policy for any AVM carrier should also take into account the future need for working equipment to access the information on that carrier.

Any library can obtain advice from audiovisual archives or from for example IASA concerning storage. IFLA collaborates with other NGOs such as IASA, FIAT, FIAF, ICA and UNESCO in the Coordinating Council of Audiovisual Archives Associations. The Section on Audiovisual and Multimedia represents IFLA in the CCAAA, alongside IFLA Headquarters.

The need for cooperation between libraries in this very complex field is evident and it should be encouraged. National strategies are required to take the lead for these problems.

9. Digitization and preservation

Libraries considering the preservation of audiovisual and multimedia materials should make themselves aware of the developing standards, and model themselves on institutions recognized for their good practice or long experiences in this field.

Preservation of long-term access to the information on unique analogue materials often involves copying that information to the same or a different medium. The intellectual property implications of such copying activity need to be fully considered.

Nowadays, the preferred means of copying such information is digitization. In order to justify the high costs of digitization, it is important to establish clear added value for the user, e.g. by improved subject analysis.

Organizations exist which specialize in digitizing video and audio documents. Before digitization, make sure that the document has not yet been digitized elsewhere, and that the library or institution has ascertained whether any copyright restrictions exist. Such enquiries are often very difficult and an obstacle to progress, but absolutely necessary. Organizations may find it useful to cooperate in a shared digitization project both to ease costs and to make sure that each document is digitized only once.

Transfer from analogue to digital formats may be difficult and is often not possible without a certain loss of information. These technologies may improve in the future, in particular in the reproduction of the characteristics of the original carrier.

Archival transfers made from old to a new format must be carried out without subjective alterations or improvements. On the other hand, it is acceptable to enhance access or distribution copies to be better listened to or viewed by the audience. In both cases, all parameters and procedures employed must be documented. Metadata have to be included in the document, comprising all the necessary technical information; compression, size of files, pixels, format etc.

For the preservation of digitised or born-digital documents, a variety of standards on hardware, operating systems, physical carriers or application programs are available. Several solutions have been investigated for long-term access:

”**conversion**” is the transfer of a document in analogue form to digital form, for example the creation of a digital text file from a paper document using a scanner to first create an image of the pages and then to use optical character recognition (OCR) software to create the digital file.

”**refreshing**” is the copying of a document to a similar type of carrier in order to prevent the destruction of the document by deterioration of the original carrier on which it resides. The document to be copied may be analogue or digital.

”**migration**” aims to extend the usability of a digital file by saving it in a more recent version of the software used to create it, or by saving it using another software program which is more current or more closely adheres to open standards.

”**emulation**” is the creation of software capable of simulating earlier hardware and software in order to permit consulting digital document files saved in earlier formats by imitating the way earlier computers and software processed the files.

A comprehensive set of [Guidelines for Digitization Projects](#) has been published by IFLA⁶.

10. Internet

A growing number of media collections is available via Internet and should be fully and rapidly accessible for users within the library. They can be documents distributed free of charge or obtained by purchase. Some electronic publications are not supplied on physical carriers and need to be copied into the libraries' access system and be stored on hard disc stacks, tape streamers or other data storage systems, transferred automatically by the publisher or harvested by the library with a harvester application.

It is necessary to register and describe every document as soon as the library receives it. Institutional Portal Software, Digital Asset Management Systems, and Rights Management Systems are becoming available to help the library manage these collections.

It is important to ensure that equipment provided by the library for Internet access enables the consultation of multimedia documents available on-line, in terms of software, graphic and sound card and headset.

Locations and resources

The following are just an initial selection from a very wide field:

Digital Libraries: Resources and projects (IFLA): <http://www.ifla.org/II/diglib.htm>

The Digital Library Federation (DLF): <http://www.diglib.org/>

Directory of Digitized Collections: <http://www.unesco.org/webworld/digicol/>

Open Archives Initiative:

<http://www.openarchives.org>

11. User services

Users should be offered the same level of service for audiovisual and multimedia, that the library offers regarding printed materials. All library staff should have an understanding of the complementarity of these collections in order to give reliable and complete advice to the user.

In most cases the library – particularly if it is a small library - does not have a special department but just a small part of the library dedicated to audiovisual and multimedia materials.

Sometimes the whole stock can be arranged thematically without regard to format. In such cases it is more common to mix books with films, video films and cassette books than with music materials.

⁶ <http://www.ifla.org/VII/s19/pubs/digit-guide.pdf>

Audiovisual and multimedia materials must be considered for inclusion in all library services, both for lending and reference purposes. In the case of lending services, it is advisable to provide listening and viewing facilities, consisting of computers or more traditional audiovisual equipment, in lending areas in order to allow users to listen to and view materials prior to borrowing.

The use of audiovisual materials in libraries tends to create noise. This must be taken into consideration when introducing such a service.

In order to maximize resources and to offer well-stocked collections in a variety of formats, libraries should standardize on the most commonly used systems, particularly for lending purposes. If important information exists only on formats not usually acquired, then these should be purchased (along with the appropriate equipment) and offered for reference use, or else made available through cooperation with other institutions/libraries whenever possible.

As a general rule a library must have equipment available for every format of audiovisual material it currently offers. If it is impossible to acquire or maintain such equipment, migration, conversion or emulation should be considered, at least for documents of special value.

Attention should be given to installing adequate security systems to protect both the hardware and the software. It is advisable to set aside a sum of money for not just buying equipment but also for insurance and maintenance costs.

Appropriate finding tools and reference works for audiovisual and multimedia materials should be available. To facilitate usage, the library should offer a guide to these collections and how to use the equipment. User training may be also a helpful offer.

Interlibrary lending policies should consider all media collections without excluding some on the basis of their special format. Centralized library services at all levels (local, regional, national and international) should include the interlending of audiovisual and multimedia materials within their policies.

With regard to the interlibrary lending of audiovisual and multimedia materials, it may be possible in some countries to establish a formal structure of interlending, either on a regional or national basis. Informal cooperation can be encouraged, in absence of established interlending procedures.

Due to the fact that audiovisual and multimedia materials can be more easily damaged than printed materials, it is necessary to emphasize that unique or original items should not be used for interlending purposes. A copy could be made (in accordance with copyright legislation) for interlending purposes.

12. Cooperation

Cooperation arrangements with other institutions could be useful for sharing information and should be considered for acquisitions, cataloging, classification, subject indexing, training, digitization, archiving and preservation questions.

Abbreviations:

IFLA = International Federation of Library Associations and Institutions
CCAAA = Coordinating Council of Audiovisual Archive Associations
IASA = International Association of Sound and Audiovisual Archives
ICA = International Council on Archives
FIAF = International Federation of Film Archives
FIAT= International Federation of Television Archives
NGO = Non Governmental Organizations

Organizational websites:

Association of Moving Image Archivists
<http://www.amianet.org/>
Coordinating Council of Audiovisual Archive Associations
<http://www.ccaaa.org/>
International Council on Archives

<http://www.ica.org/>

International Federation of Library Associations and Institutions <http://www.ifla.org/>

International Association of Sound and Audiovisual Archives

<http://www.iasa-web.org/index.htm>

The International Federation of Film Archives:

<http://www.fiafnet.org/>

International Federation of Television Archives:

<http://www.fiatifta.org/>

UNESCO AV (Audiovisual Archives): <http://www.unesco.org/webworld/audiovis/avarch.htm>

13. References

In the compilation of these Guidelines, the websites and guidelines of several other sections and institutions have been consulted:

Copyright and other intellectual property rights (IASA)

<http://www.iasa-web.org/iasa0016.htm>

Curriculum development for the training of personnel in moving image and recorded sound archives

<http://www.unesco.org/webworld/ramp/html/r9009e/r9009e00.htm>

Guidelines for public libraries (IFLA) draft 4th rev. ed 2000

<http://www.ifla.org/VII/s8/proj/gpl.htm>

Guidelines for Media Resources in Academic Libraries (ACRL) <http://www.ala.org/acrl/guides/medresg.html>

The philosophy of audiovisual archiving.

http://www.unesco.org/webworld/highlights/av_archives_120799.html

Resource List for Libraries/Media Centers (National Clearinghouse for Educational Facilities), Washington, D.C.

<http://www.edfacilities.org/rl/libraries.cfm>

IASA TC-03 – The Safeguarding of the Audio Heritage

<http://www.iasa-web.org/iasa0013.htm>

UNESCO, IFLA/PAC. *Safeguarding our documentary heritage.*

<http://webworld.unesco.org/safeguarding/>

14. An Indicative List of Audiovisual Carriers

Sound, image and multimedia may exist in analogue and digital formats on a range of carriers. The list is not exhaustive, and will expand as technology develops, but it includes:

Mechanical carriers:

- cylinder recordable (1886- 1950s) : analogue format for sound
- cylinder replicated (1902- 1929) : analogue format for sound
- coarse groove disc (1887- 1960) : analogue format for sound
- recordable coarse and microgroove discs or "instantaneous discs" (1930-...) : analogue format for sound
- microgroove disc or "vinyl" (1948-...) : analogue format for sound

Magnetic tape carriers:

- cellulose acetate based open reel audio (1935- 1960) : analogue format for sound (Fe₂O₃ magnetic pigment)
- PVC based open reel audio (1944- 1960): analogue format for sound (Fe₂O₃ magnetic pigment)
- polyester based open reel audio, compact cassette IEC I, 2inch open reel video (1959- ...) : analogue format for sound and video (Fe₂O₃ magnetic pigment)
- compact cassette IEC II, DCC, 1inch open reel video, VCR, VHS, U-matic, Betamax, V2000, Betacam, D1 (1969-...) : analogue / digital format for sound and video (CrO₃ magnetic pigment)

- compact cassette IEC IV, R-DAT, Video8/Hi8, Betacam SP, MII, all digital video formats except D(1979- ...)
- : analogue/ digital format for sound and video1 (Metal particle for magnetic pigment)

Magnetic disk carriers:

- Timex Magnetic Disk Recorder (1954)
- Floppy Disks: 3.0 inch, 5.25 inch, 8.0 inch (obsolescent), 3.5 inch (current) : digital format for data (metal oxide magnetic pigment)
- Hard disks: commonly integrated with computer hardware, sometimes organized in arrays (RAID).

Photochemical carriers:

Film formats:

- 35 mm (1894-...; standard format since 1909)
- substandard formats
 - 28 mm (1912-...)
 - 16 mm (1923-...)
 - 9.5 mm (1922-...)
 - Super 8 (1965-...)

Nitrate based: from 1895 to ca. 1952

Acetate based or « safety film »: 1920's -...

Polyester based: 1970's -...

Optical carriers:

- LV Laser Vision (1982-...) analogue format for video / still image
- CD replicated (1981-...): digital (except CD-V : video analogue) format for all media
- CD recordable (1992- ...): digital format for all media
- MD MiniDisc replicated (1992- ...): digital format for sound
- MD MiniDisc recordable (1992- ...): digital format for sound
- CD rewritable (1996...): digital format for all media
- DVD replicated (1997-...): digital format for all media
- DVD recordable(1997- ...): digital format for all media
- DVD rewritable (1998- ...): digital format for all media