

Heritage: radio archives at the INA
INA, Communications Service



Herit

INA, Communications Service

A race against time...

In France, as well as in the rest of the world, the durability of our broadcasting memory is in jeopardy. Physical deterioration is likely to cause part of the archives of the French Institut National de l'Audio-visuel (INA) to disappear. The race is now on to conserve this broadcasting heritage.

INA has now launched a digital storage plan to guarantee that the ageing archives can be saved:

- some formats, unless renovated by specialized laboratories, can no longer be used by distributors, while others are deteriorating;
- the archives are fragile: many programmes are archived on a single format, which makes them vulnerable;
- the countdown has started: the deterioration rate of some formats makes it difficult to save them, so their life is short: 15 years maximum.

Digitalization facilitates access to archived documents. These docu-

ments are enriched by documentary and legal information.

This system enables INA:

- to offer a quality service to journalists, producers and broadcasters: shorter delivery times, improved listening comfort, competitive tariffs;
- to reach new audiences (scientific, cultural and educational communities) and to keep this heritage "alive";
- to reduce communication costs: access to documents will gradually be automated.

This plan has made it possible to rediscover unique footage that will soon be accessible on line.

Values

The content is of considerable value in various ways.

Heritage value

Radio archives conserve the memory of more than 60 years of modern



Digitalization Cost of one-hour programme

Radio

Disc 78 rpm: €500
Magnetic tape: €80
DAT cassettes: €55

Television

Film
– Mechanical renovation: €650
– Video transfer and digitalization: €315
1" and 2" tapes: €90
¾" video cassette: €70

tagge

radio archives at the INA

history. It is part of our national heritage.

Rareness value

Some audiovisual documents are unique: archives from the occupation; documents that trace French political, social and cultural life up to the early 1980s; the 1950s radio interviews with celebrities from the worlds of literature, philosophy, science and show business; and sporting exploits.

Artistic value

Radio serves as a vehicle for creative works – whether music, drama or documentary – that are an integral part of our cultural heritage.

Professional value

It is an inexhaustible source of sound for broadcasters, producers, creators and editors.

The plan

By the end of 2003, the plan launched in April 1999 aims to transfer 126,870 hours of television (including 82,500 that are in danger of being lost) and 41,300 hours of radio. By the end of 2002, 112,292 hours of television (including 64,000 in danger of being lost) and 31,566 hours of radio had already been digitalized.

State of the fund

Just under 500,000 hours of radio are to be handled in the plan. The type of danger they are in depends on the format: chemical deterioration for sound tapes and physical or mechanical deterioration for radio discs and tapes, not to mention the fact that formats and players become obsolete and that programmes recorded on a single medium, which is the case for 90% of radio.

The life of older formats depends on several parameters:

- the degree of deterioration;
- the foreseeable maintainable life of the machines used to play the older formats, which depends on whether spare parts can be found;
- storage conditions: a low temperature enables the chemical deterioration process to be slowed down.

This life is estimated to be between 12 and 15 years for radio formats, which is even more worrying because of the enormous volumes involved and the conservation rate is held up by the limited resources available.

Conserving radio discs is expensive. Both sides of the disc contain a three-minute recording, and one programme is recorded on several discs.

	Period covered	Physical units	Programme hours
Radio		1,156,700	574,800
78 rpm discs, direct recording	1933 – 1955	276,000	23,000
Magnetic tapes	since 1950	806,700	515,000
DAT tapes	since 1990	9,000	11,800
Audio CD	since 1999	65,000	25,000

Overview of radio archives

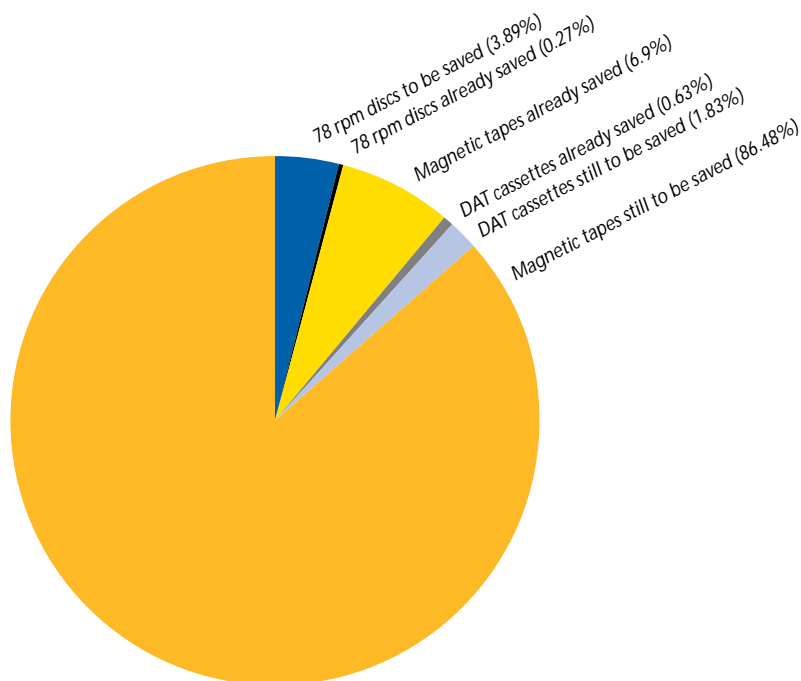
The programme has been transferred onto a hard disk, and then burnt onto a CD-ROM and an audio CD. This conservation process only applies to discs in a good state of repair. A cracked disc must be restored, which is a delicate operation.

We need to add the price of the new formats, the inventory work, quality control, internal cost of putting on line and managing the archives, and investments linked to building new storage facilities.

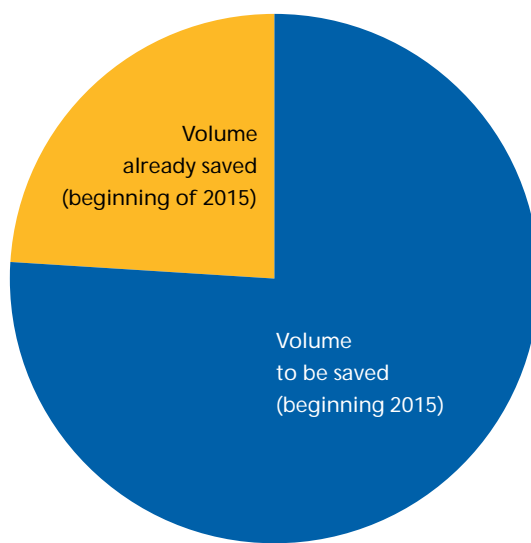
The duration of the procedure can be shortened by:

- accelerating the process which demands additional resources. INA's plan is due for completion by 2015, a deadline that is consistent with the life of these formats;
- developing tools to automate certain tasks;
- selecting certain priority documents, which means "sacrificing" certain programmes;
- the conditions under which the plan is implemented.

At the current rate, in the light of INA's resources, we would need between 5 and... 63 years depending on the formats, which exceeds the lifespan of certain formats (average life: 15 years).



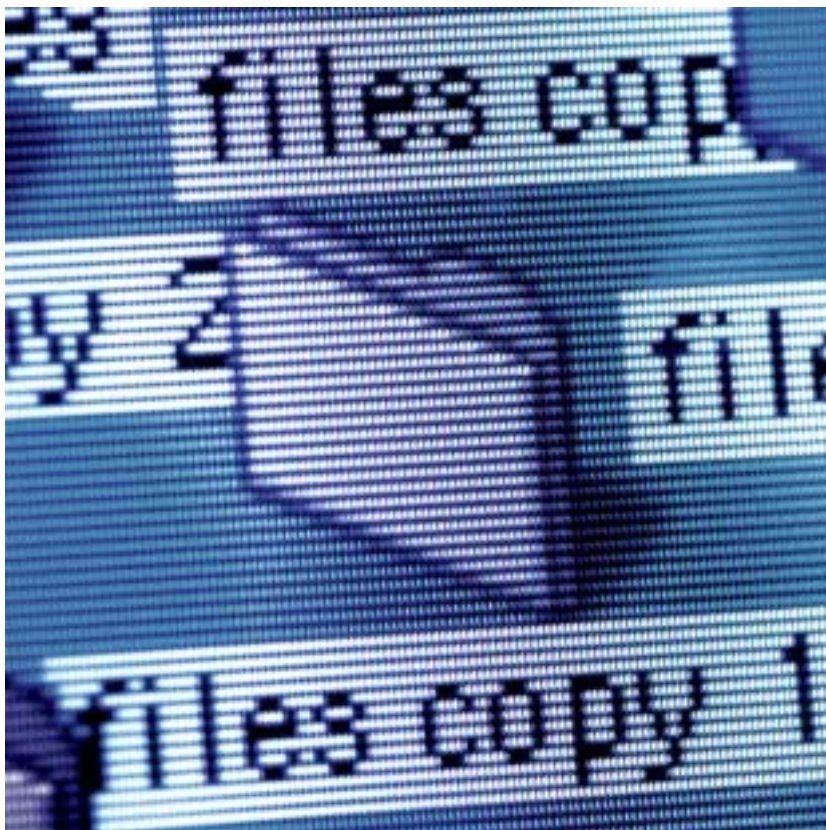
Archive status according to format, by hours and volume (forecast end 2003)



State of radio archives in 11 years time at current conservation rate (Today, 6,050 hours of magnetic tapes, 920 hours of DAT, 310 hours of 78s)

	Total number of hours preserved ¹	Number of hours preserved by the Dépôt Legal	Number of hours preserved by Archives	Number of hours under threat	Number of hours processed	Number of hours to be processed
Television	860,000	430,000	535,000	335,700	63,600	430,000
Radio	910,000	475,000	575,000	497,500	31,000	475,000
Total	1,770,000	905,000	1,110,000	833,200	94,600	905,000

1) Consolidated total excluding number of hours in professional Archives and the Dépôt Légal (legal copyrighting office) Volume of INA archives (to 31 December 2002)



Simultaneous radio broadcast



Deteriorated records, direct recording

Financing the plan

From 1999 to 2003 the average annual budget for the conservation and digitalization plan was, for radio and television, €5.7 million. So far it has been financed from INA's own funds. Accelerating the plan would require certain additional financial conditions. INA's 2003 budget is €101.6 million (not including tax). The licence fee income attributed is

€68.22 million (67.14%). INA therefore uses 2.77% of the total licence fee income (€2,458.6 million).

Implementing the conservation and digitalization plan requires several teams. One unit defines the technical choices, supervises contracts and selects the programmes to be conserved. A logistics team implements the operations and works with sub-contractors; the support unit

ensures the quality of the documentary data and the sorting and elimination functions.

About ten subcontractors provide conservation, digitalization, inventory and quality control services.

Positive assessment

So far 31,000 hours of radio have been conserved and the uploading started this year. By the end of 2003 more than 4,500 hours will be available.

The first benefit for both INA and the country as a whole is the conservation of archives and the possibility to use and consult this heritage.

For INA, digitalization has been a successful gambit, full of positive fallout that has enabled us to: redesign professional tools and procedures; improve productivity; gain a better overview of the archives; automate communication procedures; diversify the offer; and renegotiate relations with its partners.

Researchers already have access to the archives. Educational establishments have specific access via the Digital Knowledge portal of the National Education website.

Citizens' access to this heritage is through institutions such as the French National Library, the Pompidou Centre, multimedia libraries, or through record and multimedia distributors and publishers.

Technically nothing will prevent citizens eventually consulting the archives directly at INA once the matter of releasing rights and paying rightsholders has been solved.

No-one can say just how long the new formats chosen for conservation and digitalization will last. On the other hand, what digital technology does guarantee is the possibility to transfer

digitalized programmes without any loss of quality and largely automatically.

INA also relies on the Comité de Sauvegarde (Conservation Committee).^{*} Since March 2001, the Committee has been involving outside players in the choice of content – broadcasters, producers, journalists, rightsholders’ representatives, together with representatives from universities and schools, and the world of culture. The Committee is working with heritage conservation as its objective, striving to determine what should have priority when it comes to conserving material for future generations.

Choice of programmes to conserve

INA has three main criteria in its choices:

- the state of repair of the archive material and its life expectancy;
- the heritage contained in the collections;
- demand from users.

In 2002 conservation and digitalization procedures were implemented in-house to meet image and sound communication demands. These procedures complement the systematic conservation carried out as part of the conservation plan.

Conserved all?

This is the fundamental concept. Up to now, the word “priority” or the expression “time priority” has been used rather than “selection”. The very idea of leaving some of the programmes to die a natural death is simply inconceivable for any archivist.

It will be unavoidable to make a selection if the resources are not sufficient to enable us to transfer all the archive material. This is part of the assumption INA has to make. If it

comes to selecting what is saved, there is a crucial question that needs to be asked:

INA cannot decide whether to sacrifice a part of this heritage on its own. Nor can it be the only one to define the criteria for deciding whether it will keep a particular programme or not. The definition of a selection policy, and the very notion itself, must be the result of a broad consultation involving creators, historians, and users, and must then be approved by the public authorities.

RAI and the BBC

All major archive centres are faced with the double question of digitalization and conservation of programmes.

At RAI, the volume is huge: 425,000 hours of radio. A large-scale plan was launched in 1997 to give easier access to documents and make up for the lack of documentary descriptions.

So far it has:

- digitalized recently broadcast programmes: 52,000 hours of radio;
- developed a “multimedia” catalogue containing detailed descriptions of programmes, cataloguing;

- made new programmes and re-broadcast old documents.

At the BBC, the archives are equally as huge: 300,000 hours of radio. In 2000, the BBC launched a global conservation plan for its radio and television archives for a total of GBP 55 million staggered over 10 years. Priority has been given to the most fragile material. By the end of 2002, a total of 21,700 hours of radio programmes had been digitalized, but are not yet available on line.

Public service broadcasting is not only a wave of pictures and sounds. Sixty years after the creation of radio, 50 years after the creation of television, broadcasting has been elevated to the ranks of heritage. Hundreds of thousands of hours of programming archived at INA are an irreplaceable heritage, first-hand evidence of modern history, an essential part of our collective memory.

The fragility of the formats makes this heritage highly perishable. It must be saved. A total of €70 million is needed, including €20 million for radio.



Magnetic tape fed through tape-recorder

* Recommendations

Radio

- That the systematic conservation and selective restoration of discs be continued;
- That the systematic conservation of spoken newscasts and certain news magazines be continued;
- That recordings conserved in analogue format before the plan be transferred to a digital format (and later on to digital files).

Music

- Priority should be given to living music to guarantee the diversity of the musical repertoire and the history of performers.
- For programmes of musical analysis, magazines and documentaries: drastic selections based on the quality of the producer and his guests, the originality and the approach and the living musical performances rather than record playing.

Cinema and theatre

Examples: "History without pictures" or "stage arts"

Radio fiction

- Give privilege to radio fiction;
- Provide samples of programmes by politically active troupes in the post-war period;
- Ignore collections to pay better attention to individual works, authors, directors and actors.

Creative documentaries

Select programmes from the radio creation workshop based on criteria such as radio creation, contemporary art, and the quality of guests.

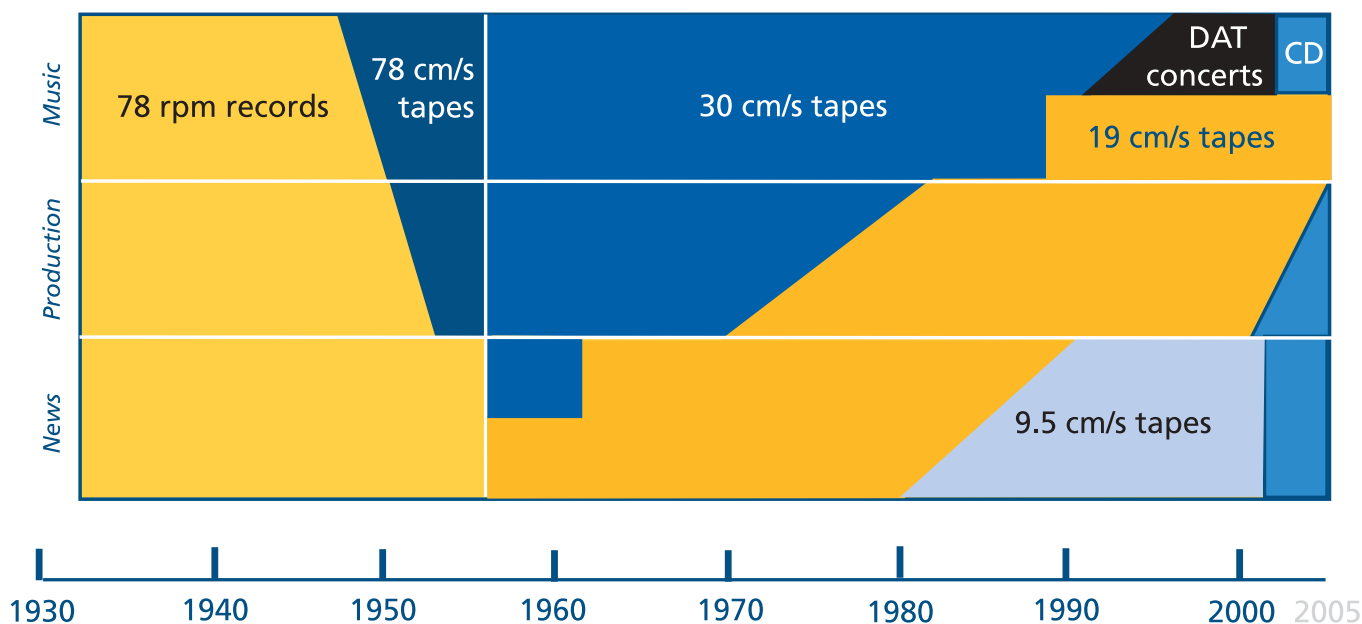
Documentaries

- Continue to conserve collections of documentaries that have great re-use potential;
- Provide samples of productions that are living evidence of the history of programmes and the radio's individual style.



It is the mission of the Institut National de l'Audiovisuel (INA) to conserve and exploit one of the world's oldest and most extensive archives of radio and television documents.

It comprises cinema newsreels, programmes broadcast by national and regional public channels, and a photographic library.



Recording support for radio (France)