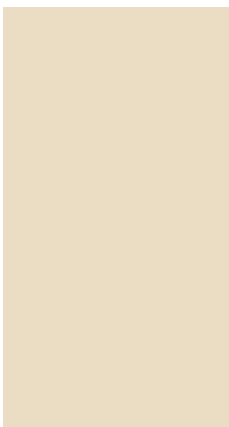


Safeguarding History in Images



A Project for ICCROM's audiovisual archives.

What is an Archive?

It is the result of document productions, of any type, content, and form, in connection to the activities of an Institute, a person, or any other kind of institution.

Thus, an Archive grows together with the activities of the institution that produces it.



Then, what ICCROM Archives are?

The ICCROM Archives consist of non-current, inactive records generated by the organization's activities, and which have **SUFFICIENT VALUE FOR THE HISTORY AND ADMINISTRATION of ICCROM to warrant their preservation.**

What kind of records?

Paper Documents

Architectural drawings

Photographic materials

Digital Files

Audio Materials

Video Materials



The Audiovisual Collection

About 1000 items in analog formats

Held by the:

- **Archive**
- **Library**

Type of items:

38
Motion
Picture
Films



Type of items:

198
Umatic
and
29
Umatic
-S



Type of items:

9 Betacam Tapes



Type of items:

476

VHS

3

VHS-

C



Type of items:

39 Mini
DV



Type of items:

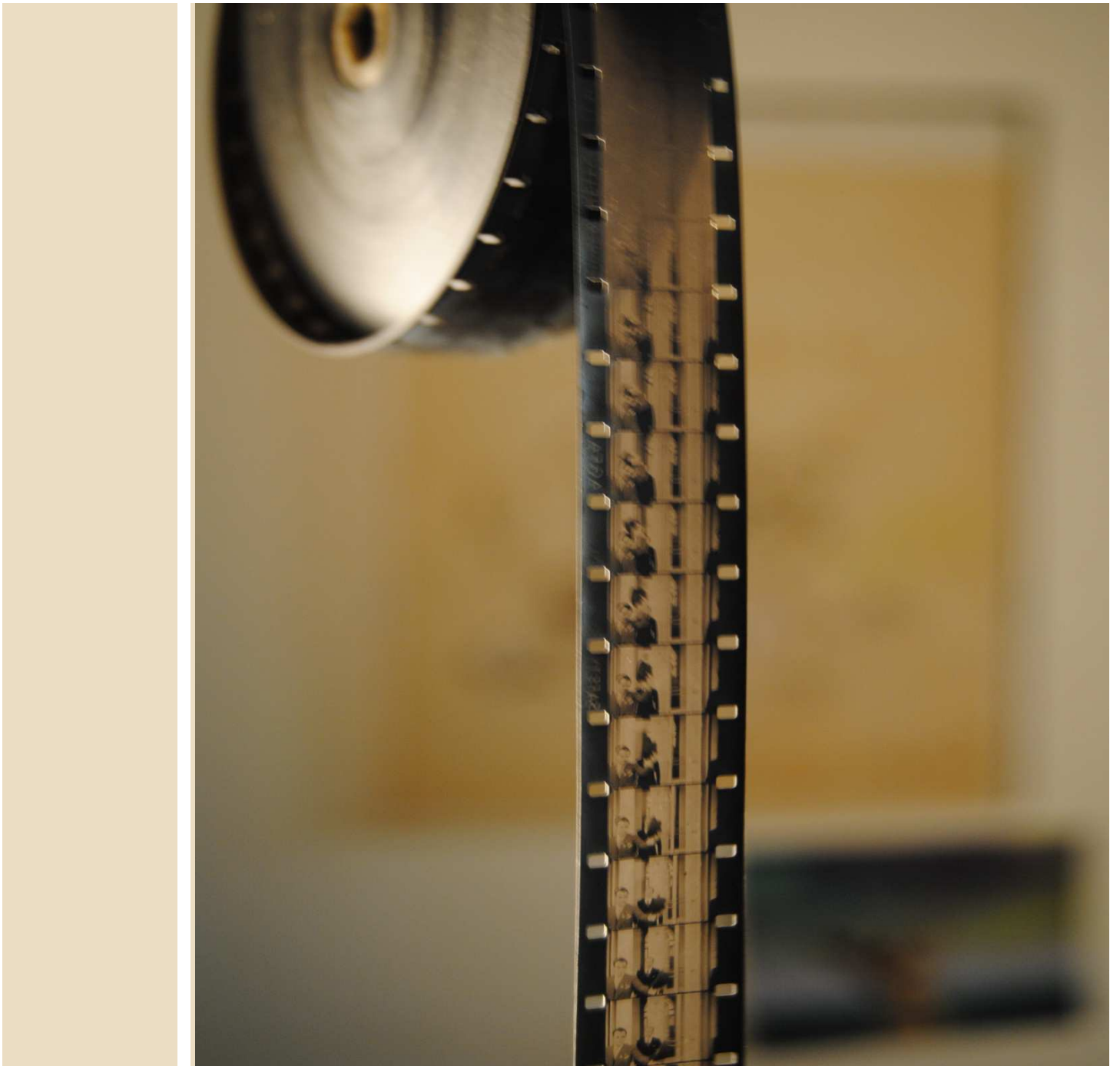
25 Sound
tape reels



Type of items:

317 Audio
cassettes





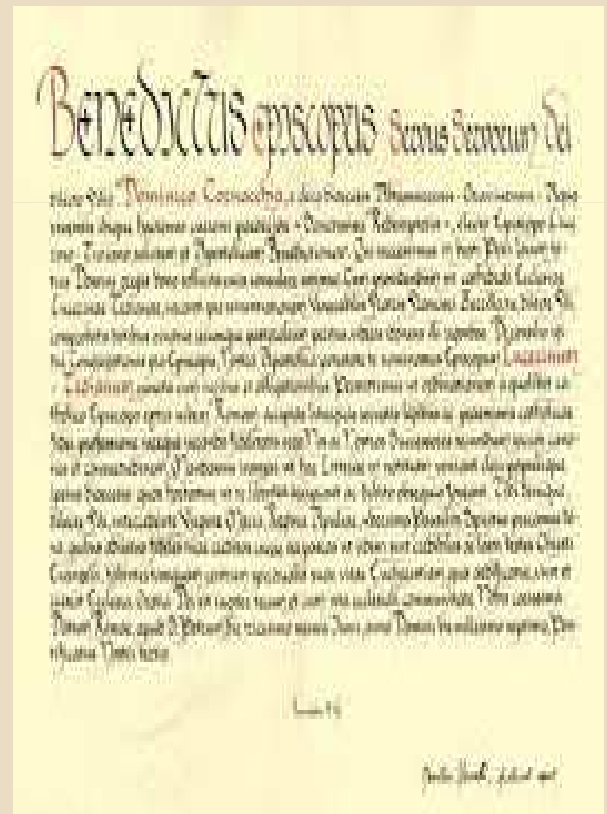
Main Problems of AV materials:

A brief Introduction

1. Duration:

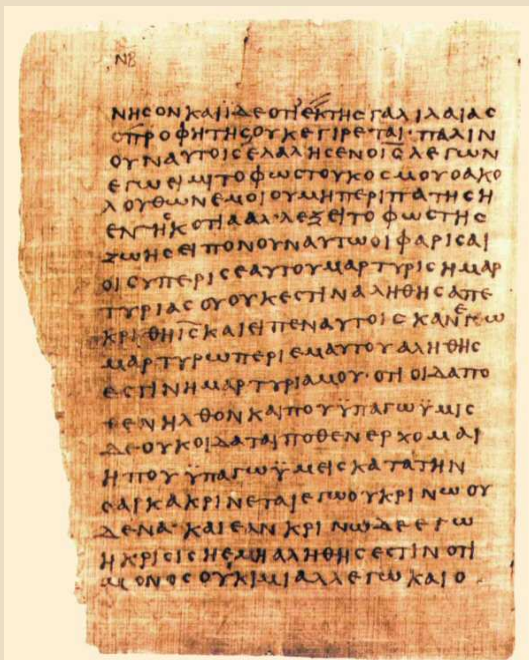
While we have paper documents from 1500 years ago

...that we can still read



...life expectation of an audiovisual material is uncertain, but probably shorter, even in the best conservation conditions.

1500 years



... 60 years



Main Problems:

Format Obsolescence

= lack of technical equipment



Main Problems:

Breaking of supports

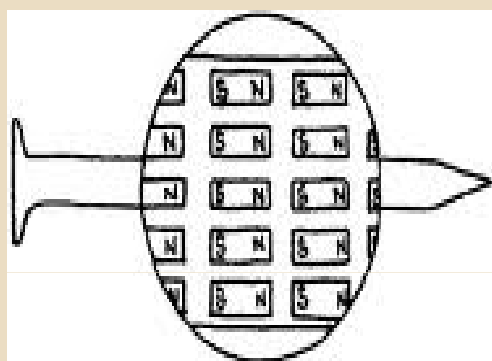
Deterioration of supports



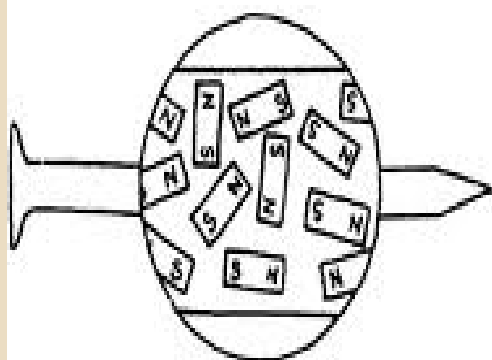
In particular for tapes:

Demagnetization

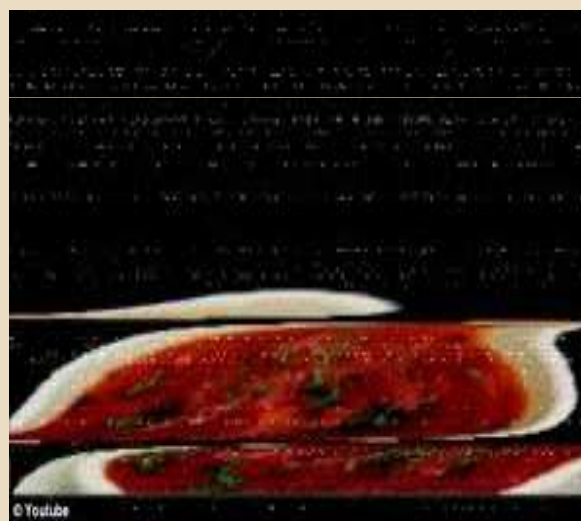
= image errors



MAGNETIZED



DEMAGNETIZED



Motion Picture Films

Vinegar
Syndrome
(acetate)



Motion Picture Films

Decay
(mainly
nitrate)



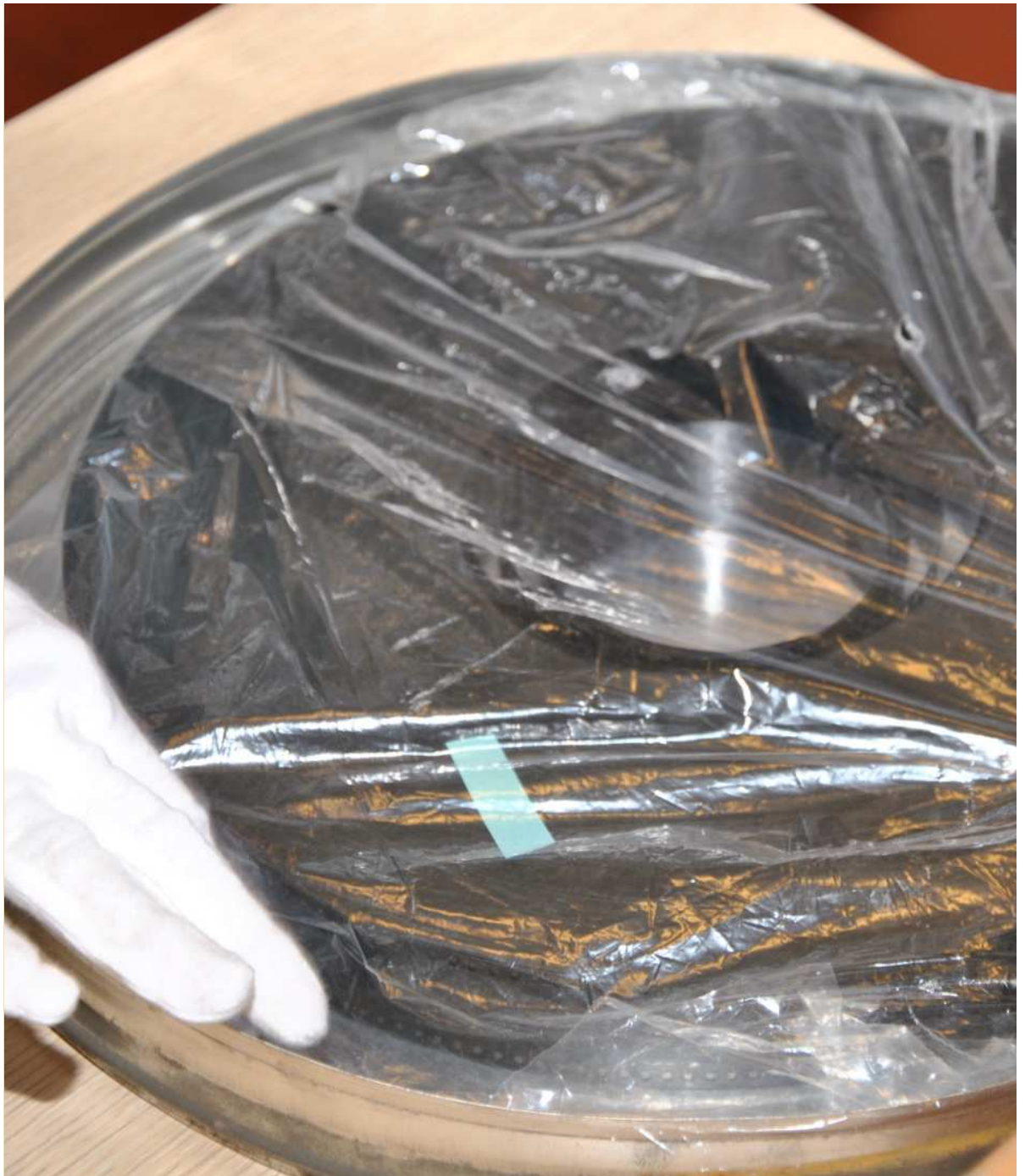
...and other levels of degradation...

Colour Fading



...many others...

- Creases
- Dropouts
- Crumpled tapes
- Tape deformation
- Dryness and breaking of film
- Sticky tape syndrome
- Skew error
- Scratches



Condition Assessment

March – May 2013

Step 1:

-Checking the collection

- listing the material by series.

- Providing all the available description.

ALEJANDRO ALVA'S AUDIOVISUAL COLLECTION

Item No.	Subject	Author	Date	Copyright	Format	Colour-B/W	Duration
1 ?].	Earth architecture ; Building with earth; Tradition & modernity [Casa 24 hours	CRAT erre			1 videotape (VHS - PAL)		17'

Step 2:

- Dividing items by formats
- Checking their external condition and integrity.



Step 2

Assessing:

- storage
- housing



Step 3:

Assessing of motion picture films:

- Type of film
- Condition of the film

Vinegar syndrome checking

With acid-base indicator papers to verify the production of acetic acid



With indicator papers:

Blue strip: Low Level of degradation

Light green strip: medium/high level of degradation



Assessing of videotapes: checking of IMAGE ERRORS- Tape Deformation



Assessing of videotapes: checking of IMAGE ERRORS- Dropout



Assessing of videotapes: checking of IMAGE ERRORS- Crumpled Tapes





ACTION PLAN

Planning Short, Medium, Long Term actions to guarantee the collection preservation

Short Term Actions:

1. PRESERVATION OF THE ORIGINAL



Cleaning of tapes



Arrangement of a separate archival section for the conservation of audiovisual materials, with proper levels of humidity and temperature



Rehousing



Arranging of plastic or similar insulating material on shelves to prevent demagnetization of materials

2. PRESERVATION OF CONTENTS

- PREVENT DATA LOSS AS SOON AS POSSIBLE.

- The preservation of the object is important, but at the same time we need to preserve the content.

- Search for a BALANCE BETWEEN
 - ▣ FINAL PRODUCT QUALITY
 - ▣ RESOURCES AVAILABLE.

THE MORE WE WAIT, THE MORE WE LOSE.

Thus, priorities are:

- Evaluation of content priorities
- Arrangement of a DIGITIZATION PLAN.
- Identification of a digital format for Archival Master (i.e.. = “The copy with the best available signal quality, prepared for archival purposes)
- Identification of a good format for derivatives, for internal and external use, as publication on web, or inclusion on archival Description software.

Medium Term Actions

1. Cataloguing

- A previous cataloguing action of the material was done in different periods.
- During this project, the collection was further surveyed and descriptions were updated
- A further cataloguing work has to be done, with the use of the Archive Description Software.

2. Creation of derivatives

- Creation of derivatives has still to be analyzed in details. It will be connected with the use of audiovisual documents, and checking of copyright status

Long Term Actions

1. Refreshing

- Digital Files are instable. It will be necessary of re-operate a periodical checking of the conditions of files, and an updating of formats and software, if necessary, every 2 or 4 years.

2. Preserving

- Though if we have “new” Digital Archival Masters, the original Copy is the Analog One. So, especially concerning the unique copies and the motion picture and sound tape Reels, we have to guarantee an adequate storage, respecting the requested conditions for the conservation of audiovisual materials.

The standards for conservation are set by ISO

(iso 18923:2000)

How To start ?



It has been a long and
difficult research concerning:

Formats

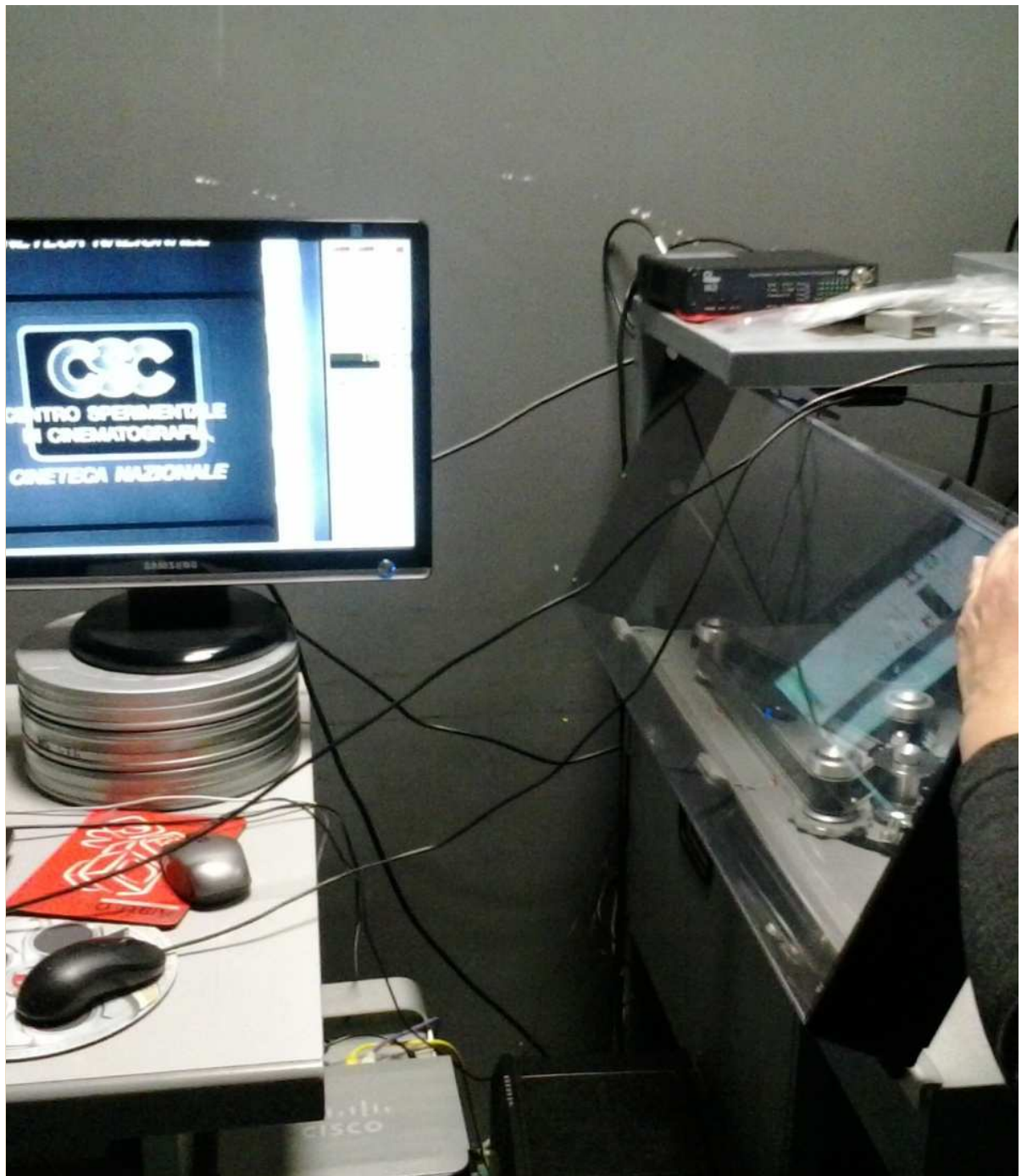
Institutions

Laboratories

*.avi *.mkv	AVI MKV	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	MP3 / AC3 / LPCM / ADPCM / DTS Core
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	800x600	6 ~ 30	8	
*.asf	ASF	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / WMA
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	800x600	6 ~ 30	8	
*.wmv	ASF	Window Media Video v9	1920x1080	6 ~ 30	25	WMA
*.mp4	MP4	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	MP3 / ADPCM / AAC
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		XVID	1920x1080	6 ~ 30	8	
*.3gp	3GPP	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	ADPCM / AAC / HE-AAC
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.vro *.vob	VRO VOB	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM
		MPEG2	1920x1080	24 / 25 / 30	30	
*.mpg *.mpeg	PS	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM / AAC
		MPEG2	1920x1080	24 / 25 / 30	30	
		H.264	1920x1080	6 ~ 30	25	

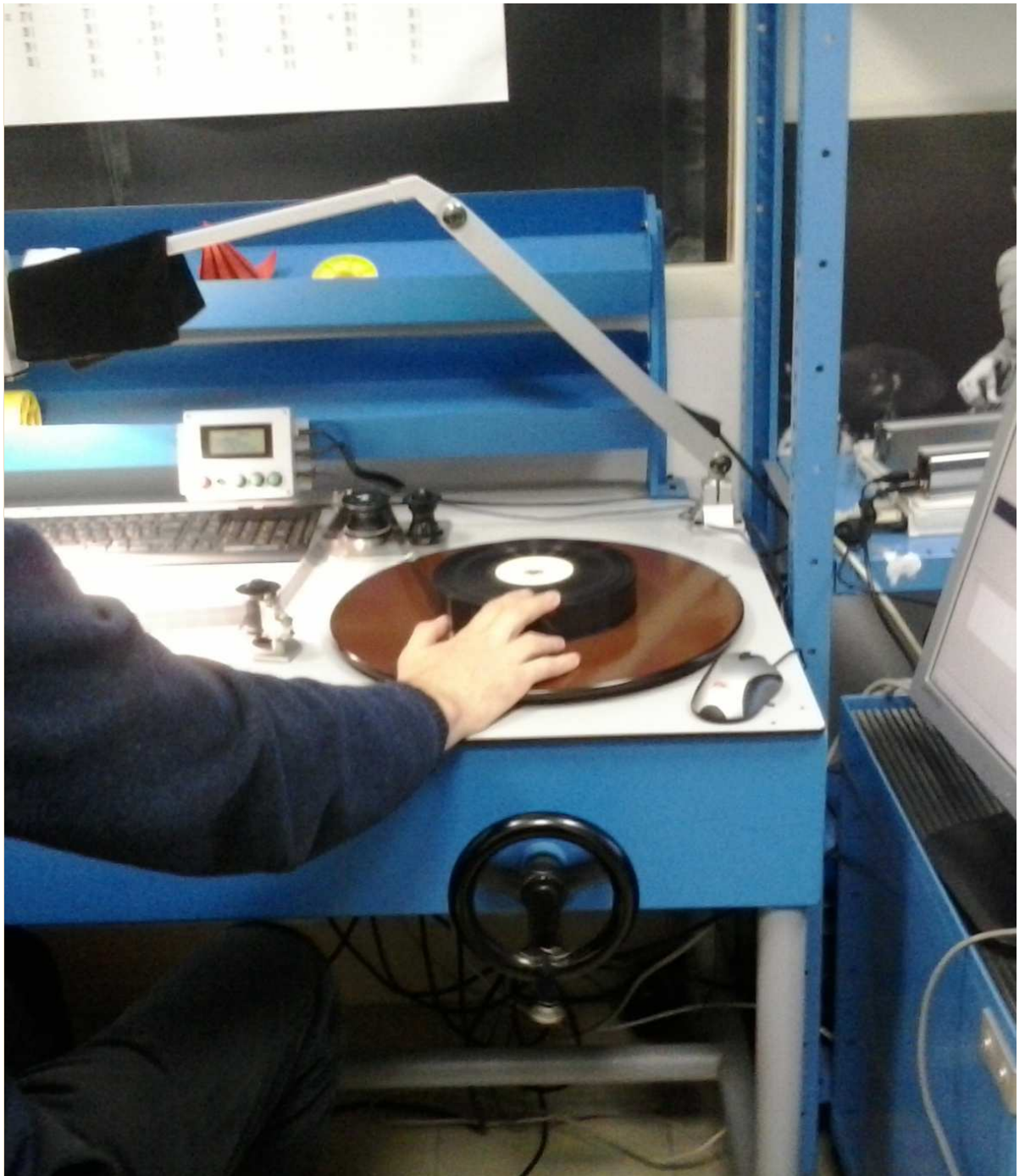
Formats

- ❑ Huge range of opportunities
- ❑ No standard solutions for videos



Institutions

We had contacts with many Italian and foreign Institutions for suggestions and guidelines



Laboratories

And evaluated all the opportunities of employing external staff and structures to perform this work

But now...

WE HAVE A PROJECT!

... and we are ready to start...!



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- Daniela Sauer
- Gianna Paganelli
- Marco Carra
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- ICSBA- Istituto Centrale per i Beni Sonori e Audiovisivi
- SSAB- Scuola Speciale per Archivisti e Bibliotecari
- Emanuele Pascucci- Audiovisual Conservator