

INTRODUCTION

The documentary heritage preserved by LUCE Historical Archives, of which the "LUCE Fonds" are the core component, has always been subject to active preservation, promotion and dissemination strategies. The LUCE fonds nominated for the Memory of the World's Register are a well defined and significant body of material among other assets that highlight its importance and value. All the management activities herein described, albeit involving the entire documentary heritage held by the LUCE Historical Archives, primarily encompass the present and future strategies specific to the nominated fonds.

This document has a double purpose: a) to inform on the management of the fonds nominated for the International Register of the Memory of the World and on the relevant preservation strategies addressed to the LUCE documentary heritage in its entirety; and b) to describe the framework for a future "management plan" based on three strategic area: Preservation, Knowledge, and Dissemination, each of them defined in terms of its objectives (see matrix 1).

GENERAL INFORMATION

The "historical" nature of the Archives and its national preservation.

The LUCE Historical Archives is, in its entirety, subject to the formal control of the competent Archival Superintendence, which has a supervisory role on private archives at regional level (thus, as the LUCE Archives premises are located in Rome, the Lazio Superintendence is in charge of supervising it). On July 9th 1997, the Superintendence acknowledged the archival holdings of Istituto LUCE as of “national historical interest”, as meeting the requirements of the Decree of the President of the Republic n° 1409, September 30th 1963, articles 36 and 38. Subsequently, a new law decree on cultural heritage, DL n° 490, October 29th 1999, article 3 letter d, included in the category of cultural heritage "photos and samples of cinematic and audiovisual works, motion and still pictures, as well as aural documents produced over twenty-five years ago." Accordingly, in June 2003, the Lazio Archival Superintendence updated its acknowledgment of national historical interest for the LUCE Historical Archives including all its audio-visual holdings.

The mission of the Archive

Bound by the acknowledgment of national historical interest, the mission of Cinecittà Luce Spa is established by the Ministry of the Cultural Heritage and Activities Act. Among the different functions assigned to Luce, the maintenance of its vast archival heritage, and the provision of access to and dissemination of its documentary memory are considered the most important.

Strategies and objectives

The existing management system's description is articulated into strategies and objectives.

Matrix1. Strategies and objectives along which existing and future actions are organized

STRATEGIES	OBJECTIVES
1.PRESERVATION	1.1 RESTORATION/CONSERVATION OF ORIGINALS
	1.2 SECURITY/RISK PREVENTION
	1.3 DIGITAL CONVERSION
2. KNOWLEDGE	2.1 CATALOGUING
	2.2 USE AND ACCESSIBILITY
3. DISSEMINATION	3.1 INSTITUTIONAL COLLABORATIONS
	3.2 ARCHIVAL COLLABORATIONS
	3.3 EDUCATION
	3. 4 DIDACTICS

1. PRESERVATION

The documentary heritage preservation strategy is developed through three interrelated activities, on the basis of the principle that preservation must be effective not only in relation to its contents, but also in terms of original media/supports and work processes:

- a. Conservation and restoration of media/supports
- b. Security and risk prevention
- c. Digital conversion

1.1 Conservation and restoration of supports:

Cinematographic heritage

The film support suffers, as do other supports, from the ravages of time and from a "natural" decline that, inexorably, result in loss of content. For this reason, restoration activities are systematically carried out. They concern both the original support, which is philologically reconstructed to the original version

created by the author, and the digital supports, which, thanks to new technologies, we can reconstruct despite the passage of the time.

The cinematographic heritage is in different formats, primarily 16 and 35 mm. The latter is particularly common in the LUCE fonds which is also characterized by the presence of flammable film that, until the 1950s, was used as a common support in movies production. There are various types of films: negative, positive, lavender, duplicates, inter-negatives and inter-positives. The materials are sealed in different formats of fireproof, anti-static plastic boxes. Moreover, in order to delay the degradation processes and to protect them from atmospheric agents, dust and microorganisms, the films are preserved in a stable microclimate with controlled and constant temperature and humidity.

There is also a regular maintenance program, conducted every year, which consists of the substitution of boxes, the verification of the condition of films through a film-viewer machine, and of systematic interventions undertaken to strengthen and defend the supports.

Photographic heritage

The original supports of LUCE's photographic heritage are: silver bromide glass-plate b/w negatives, format 9x12s cm; nitrate cellulose films and acetate cellulose films in various formats: 13x18 mm, 6x6mm, 24x36mm, and photographic prints.

Beginning in the 1960s, particular attention was gradually focused on maintenance techniques. Today, the original supports are individually preserved in ph-neutral paper envelopes made up of 100% alpha-cellulose and lignin-free; this means that they are made with cotton and flax rags. The envelopes are kept in containers of the same material in order to protect them from physical alterations, dust, dirt and abrasions; everything is preserved at a constant temperature and

humidity. In the 1980s, all the original supports were converted to 70mm negatives; these are considered duplicate of the originals.

1.2 Security and risk prevention

Two strategies are adopted in order to avoid the risk of losing the LUCE Fonds unique contents and original supports:

- 1) Relocation of matrices and material duplicates in different "preservation warehouses", in accordance with the recommendations by the International Federation of the Film Archives. Thus, in case of disaster or natural calamity (earthquake, flood, terrorist attack, etc.), the content is not lost, thanks to the existence of backup copies stored in different repositories. In particular, in Istituto LUCE's historical headquarter, there is the so-called Cellari storehouse, where 18,000 rolls of flammable negative and positive films are preserved. The storehouse is made up of 16 beehive-cells, each of them containing 132 holes in masonry, and 32 cells destined to backup duplicates (20,000 rolls). Moreover, there are three other repositories where copies of the whole heritage are stored.
- 2) Adaptation of conservation storehouses that preserve films matrices. They are equipped with an air suction and filtration system, that, every hour, guarantees the integral air change inside cells in order to avoid the saturation of gases emitted by the cellulose nitrate, and a fire prevention system. The latter is regulated by a centralized system capable of monitoring the temperature. In the event that the temperature rises above 42° degrees, the system immediately releases CO2 at low temperature and strong pressure, freezing the environment and inhibiting a possible fire.

The repository structure addresses all safety conditions and has been issued a Certificate of Fire Prevention (CPI - Certificato Prevenzione Incendi) by the National Fire Corps.



Istituto Nazionale LUCE Historical Headquarter, in Piazza di Cinecittà, Rome, where the following original films (1) and digital copies (2) are preserved:

- **Giornali LUCE**
- **Rivista LUCE**
- **Cronache dell'impero**
- **Cine G.I.L.**
- **Notiziario Nuova LUCE**





In the IT laboratory (2) of the same building are preserved the original photographic matrices of the following series:

- **Attualità**
- **Serie L**
- **AOI (Africa Orientale Italiana)**
- **Reparto guerra**
- **Albania**
- **Teatro**
- **Grazia e Giustizia**



CED

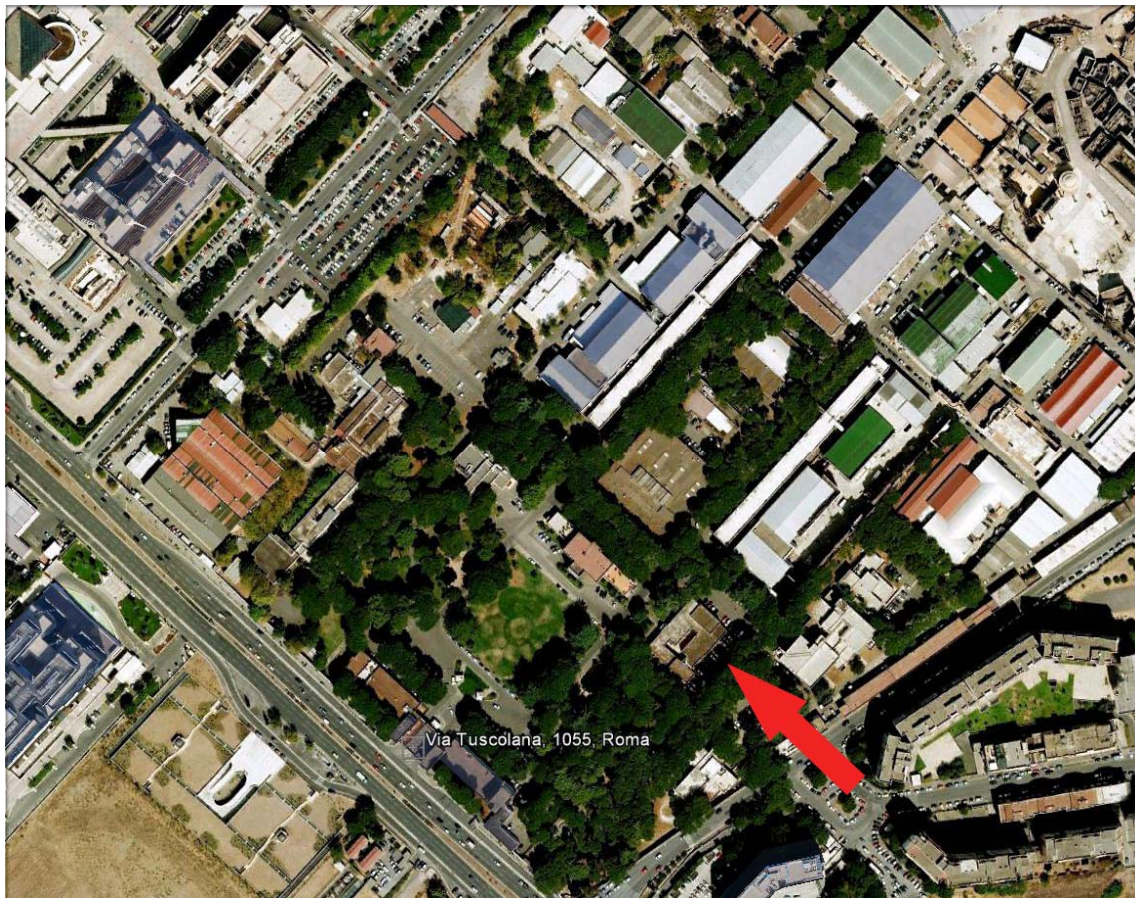


The preservation storehouse in via Anagnina, Rome, where the analogic and digital backup duplicates of the following funds are preserved:

- **Giornali LUCE**
- **Rivista LUCE**
- **Cronache dell'impero**
- **Cine G.I.L.**
- **Notiziario Nuova LUCE**



“Vittori” storehouse



The preservation storehouse inside the Cinecittà complex, in via Tuscolana, Rome, where the second analogic backup copy of the following fonds are preserved:

- **Giornali LUCE**
- **Rivista LUCE**
- **Cronache dell'impero**
- **Cine G.I.L.**
- **Notiziario Nuova LUCE**



“Lanna” storehouse where the photographic original matrices of the following series are preserved:

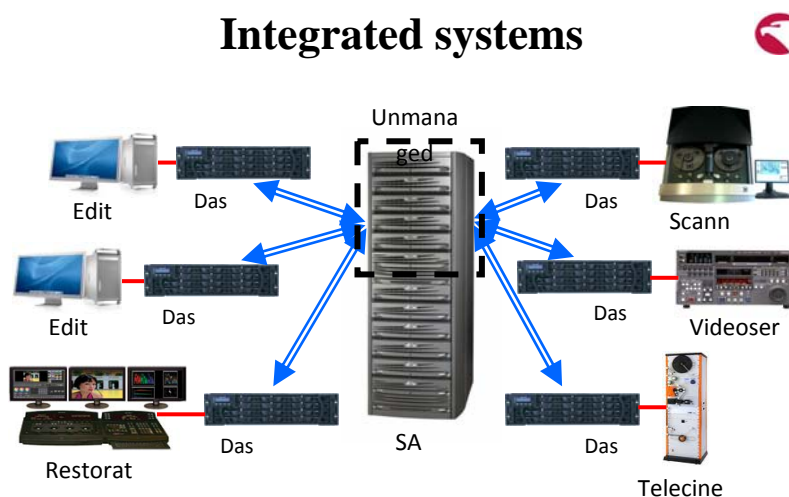
- **Attualità**
- **Serie L**
- **AOI (Africa Orientale Italiana)**
- **Reparto guerra**
- **Albania**
- **Teatro**
- **Grazia e Giustizia**



Conservation boxes

1.3 Digital reconversion

The LUCE Fonds have also been preserved through time thanks to a conversion system. Analog reproduction, which has secured the documentary heritage by creating copies on safe supports, has been complemented by digital conversion (quality 2k). In fact, the lab for reproduction on analog supports was 5 years ago complemented by a digital laboratory, the workflow of which can be seen in the picture below. The quality of the LUCE integrated system is guaranteed by the excellence of the equipment, the system's infrastructure, and the Media Asset management's functions. Films and photos conversion is carried out by scanning in an international standardized data format (the standardization guarantees the interoperability of the results); then the digital copy is filed and the process of digital restoration is carried out. Automatic migration to a new storage systems is also ensured in order to avoid obsolescence, as well as a possible reversion to film, without any apparent loss of quality.



2. KNOWLEDGE

2.1 Cataloguing

xDams is the product of a project financed by the European Community and it is the cataloguing system in use. It works in a specialized and integrated environment in order to treat heterogeneous documents using common technology, descriptive syntax and methodology. This platform is totally web-based and is founded on the use of an open data format, XML, to represent and preserve data models. Moreover, as its development environment, it adopted OpenSource software, JAVA 2 ENTERPRISE EDITION and Jboss Application Server: they guarantee a multiplatform diffusion both for client and provider.

Interoperability and resource sharing are guaranteed by the use of XML technology (eXtensible Markup Language), a standard developed by W3C in 1998, and by the adoption of OAIPMH protocol for the exposure, through harvesting activities, of data sets treated by xDams' databases. Those databases are independent from specific application solutions. In this way, the database, in conjunction with other informative systems, can be easily "migrated" to the platform. xDams adopts the standard EAD (Encoded Archival Description) in order to encode descriptive information.

The variety of databases' contents necessitated the creation of a thesaurus for research management. Today it includes about 70,000 headwords, and could be considered a twenty-first century encyclopedic handbook.

2.2 Access and use

The site www.archivioluce.com provides online access to information and visualizations of 100,000 audiovisual documents and 400,000 photos. However, in the Historical Archive LUCE's Multimedia library, which is open from Monday to Friday from 9.00 a.m to 1.00 p.m. and from 3.00 p.m. to 5.00 p.m, specialized

personnel assist those who prefer direct access. Web assistance is guaranteed through the sites mediateca@cinecittàluce.it and ricerche@cinecittàluce.it.

The materials are also available through public-relations offices, with preferential access given to students and researchers.

THE WEB SITE

All the newsreels and part of the photographic materials that comprise the "Fonds LUCE" are freely accessible online thanks to an advanced search system that contextually allows access to catalogue data and digital images. Since 2002, the entire database has been accessible at www.archivioluce.com. It is possible to have access to the database through a textual search motor, indexes and dictionaries consultation, navigation of the hierarchical structure of every single archival fonds, and the research tools of the authorities files. The documentary platform integrates in one environment both the database management's functions and the entire access to and use of the information system. Therefore it is possible to:

- research through the authority file (from the authority file to the database / inside the authority file);
- visualize the results and the selected information;
- conduct free text research on dictionaries, on the entire system, single databases or multiple databases;
- refine the research;
- present results as pages, with the images preview or thumbnail;
- complete card visualization;
- access the images (fixed or in motion) using specific visualization programs.

NOMINATION'S WEB SITE

In support of the candidacy, a specific website was developed (as suggested by the Nomination Form at 3.3 point) where it is possible to access separately the nominated funds' database in the same way as through the existing LUCE site described above.

3. DISSEMINATION

The LUCE Fonds dissemination is realized through the web site and through different forms of institutional and archival collaborations that relate also to education and training.

3.1 Institutional collaborations

Istituto LUCE has established strong relationships with institutions at every level: State, Regions, Provinces and Municipalities. These relationships have produced web portals and access routes¹, exhibitions² and cultural events.

3.2 Archival collaborations

Thanks to the collaboration with Kinetics of Friuli, Aamod, Quilici Archives and the Archives of Albania, it was possible to intellectually integrate and make available collections of different provenances.

¹ Italian Regions, on the iconographic documentation of the territory; Casa del Cinema, on all the materials of the world show business; Chamber of Deputies, on the 1900 political and parliamentary history; Eni (Ente Nazionale Idrocarburi), on energy in the history.

² Among these: Milan, Palazzo Reale "Futurismo 1909/2009"; Rome, for the 150th anniversary of Italian unification: "Il Quirinale: dall'unità d'Italia ai nostri giorni "; Rome, Camera dei Deputati: "Rappresentare l'Italia. 150 anni di storia della Camera dei Deputati"; Rome, Archivio Centrale dello Stato: "La macchina dello Stato. Uomini e strutture che hanno fatto l'Italia"; Rome, Museo Capitolino: "Lux in arcana. L'archivio segreto vaticano si rivela."

The LUCE Historical Archive is part of a research team, led by the Italian General Direction for the Archives, and including the Lazio Archival Superintendence, and the archival professional association, ANAI. It is also part of an International Council of Archives (ICA) project for the development of principles of documentary access, in accordance with the principles of the "Charter of Film Rights" compiled in 1980 by UNESCO.

3.3 Formation

The LUCE Historical Archives constantly hosts interns, in collaborations with the University La "Sapienza" in Rome, in order to contribute to the training of professional audiovisual archivists.

At the same time, the cinema and the digital laboratory provide professional courses intended to develop technicians.

3.4 Education

The LUCE Fonds are not only used for research but also for educational projects at every levels. One example is the project "L'Italia in LUCE," developed in collaboration with MIUR (Ministry of Public Education) for the Italian secondary schools with the purpose of disseminating the 1900s' historical memories in a multidisciplinary perspective.

The Archives and the Institute LUCE also contribute to the delivery of university courses that focus on audiovisual archival and historical subjects.

Tab. 1 RESPONSIBILITIES, ACTIVITIES AND OBJECTIVES IN RELATION TO THE STRATEGIES

OFFICES		STRATEGICAL INTEREST AREAS							
		Heritage			Valorization			Dissemination	
		Security	Enrichment	Conversion	Cataloguing	Use	Commercial promotion	Formation	Institutional relationships Archival relationships
conservation									
preservation copyright Heritage and Library enrichment									
Integrated technologies laboratory	Physical restoration of analog supports								
	Digital conversion and restoration of photographs								
	Conversion and restoration of films and videos'								
	CED and Data Asset management								
Multimedia library									
archivioLUCE.com									
Public-relation offices									

FUTURE MANAGEMENT PLAN: NEXT PROJECTS

In the future, our management plan will aim to further develop the existing activities and complement them with new initiatives. Today, in relation to the three strategies, the following projects and activities are in course.

CONSERVATION

The archives is looking for a new, safer preservation repository for the original negatives, because they must be moved in an environment more protected than the present from external polluting agents.

The digital conversion program should be complete in five year.

KNOWLEDGE

Improvement of the actual site and of the general access system.

Already in 2012, the quality of the audiovisual images on the site will be improved and the watermarking of the photos will be made less invasive. It will be possible to research with Multilanguage, and, in accordance with the logic of the creative commons, some licensed usage (licenze di utilizzo) of the "Fonds LUCE" will be available in support of education and creative endeavours. Finally, the Fonds LUCE's entire audiovisual heritage will be accessible on Europeana.

The cataloguing of the nominated photographic fonds will be continued.

In the eventuality of the inclusion in the International Register of the Memory of the World, a special page entirely devoted to MOW Program will be added to the website with the possible inclusion of a connection to UNESCO's Italian heritage of the humanity sites.

DISSEMINATION

Project “Associated Schools in the UNESCO’s network”.

This is a project undertaken under the auspices of the UNESCO Italian Committee. It aims to create a network of schools on the theme of Memory, within the general UNESCO project, known as ASP (Associated Schools Project).

Project for audiovisual archives network.

This project has with two different purposes: 1) at the international level, if the MoW nomination is successful, it will create a workgroup of audiovisual archives coordinating the program’s activities; 2) at the national level, it will use the new management plan to support the coordination of audiovisual archives and to develop manuals on maintenance, control and monitoring methods and tools.

Project "Memories of the World - LUCE for the UNESCO Sites ".

This project will make the Fonds LUCE audiovisual heritage available for multidisciplinary studies and research projects and for the valorization and knowledge on foreign or Italian sites belonging to or nominated for to the lists of the Human World Heritage.

Summary Table:

STRATEGIES	OBJECTIVES	IN ACT	IN IMPLEMENTATION	PLANNED
CONSERVATION	SECURITY/RISK PREVENTION			
	PRESERVATION/RESTORATION ORIGINALS			
	DIGITAL RECONVERSION			
KNOWLEDGE	CATALOGUIN			
	ACCESS AND USE			
DISSEMINATION	FORMATION			
	INSTITUTIONAL COLLABORATIONS			
	ARCHIVAL COLLABORATIONS			
	EDUCATION AND TRAINING			