This survey was carried out with the support of the experts’ network that since 2002 has sustained the activities of the Italian National Representative for digitisation and the European projects carried out by the Ministry for Cultural Heritage and Activities (MINERVA, MICHAEL etc.).

As far as the Ministry’s offices are concerned, the methodology chosen to communicate the European Commission’s activities and to solicit answers to the questionnaire is to elaborate memorandums for the various general directorates (libraries, archives, heritage) and central institutes (cataloguing, restoration, libraries’ heritage etc.).

In structuring the replies, the description of the cross-domain initiatives precedes that of the other sectors of activity.

A. DIGITISATION AND ONLINE ACCESSIBILITY

A1. Progress on the systematic gathering of information about current and planned digitisation of books, journals, newspapers, photographs, museum objects, archival documents, audiovisual material and the availability of overviews of such digitisation in order to prevent duplication of efforts and promote collaboration and synergies at European level.

The Italian Ministry for Cultural Heritage and Activities is employing a considerable amount of resources in various main actions that aim at fulfilling the goals of the Recommendation and Council Conclusions and for systematic gathering of information about digitisation in Italy.

The initiatives described below are being carried out at national level. Most of the Italian Regions have also information systems for their cultural heritage structured on a geographical basis; for them and other specific projects of digitisation not included in this paper, see the Italian report: Progress Report of the National Representative Group: coordination mechanisms for digitisation policies and programmes 2006, published by MINERVA.<http://www.minervaeurope.org/publications/globalreport/globalrep2006.htm>

CROSS-DOMAIN NATIONAL INITIATIVES

The MICHAEL service <http://www.michael-culture.it>

In Italy, MICHAEL has proved to be the most suitable tool for the systematic gathering of information about projects and programmes for the digitisation of cultural content and objects of any kind, including information about the physical collection sources for the digitisation and outcomes of the projects: digital collections, online and offline services.

The international MICHAEL Culture service <http://www.michael-culture.org> aims at promoting European cultural heritage among the general public worldwide, offering simple and fast access, which enables potential users to access the digital collections which have been developed over the years by the European cultural institutions: museums, archives, libraries, conservation offices, audio-visual archives, universities and research institutes...

No cultural organisations are excluded from the inventory, whether they are public or private, big or small, national, regional or local.

MICHAEL is the multilingual inventory of the European cultural digital collections. Intended as the registry of the European Digital Library, MICHAEL provides a catalogue of European digital cultural collections which might help the EDL to identify and localize the resources to be made available at object level by the single European access point, Europeana.

In fact, the MICHAEL catalogue includes all relevant details for technical, syntactic and semantic interoperability, such as interoperability protocols supported by the databases (such as OAI-PMH, Z39.50 etc.), terminologies...
and cataloguing standards to which the collections are compliant, digital format of the objects in the collection. When MICHAEL was set up, there was no initiative in Italy aimed at providing a structured inventory of cultural collections, either physical or digital. Therefore MICHAEL began a systematic cataloguing of the digital and digitised collections managed by cultural institutions from all sectors, and with any size or administrative origins from all over Italy. After one and a half years of activity, we are beginning to have a reliable overview of digitisation projects and activities, fostering synergy among projects and the planning of complementary initiatives, so helping to avoid fragmentation and duplication of efforts. The comprehensive map of digitisation activities in Italy resulting from MICHAEL is a useful tool for decision makers and helps national, regional and local public administrations to monitor the results of their funding and to enter partnerships for further digitisation activities. We can also appreciate the number of private bodies active in digitisation and interested in cooperating with public cultural institutions. We hope that this will also foster public-private interaction in forthcoming digitisation programmes.

In Italy, MiBAC has organized the census of the digital resources by mobilising its central and local institutes, but aiming at the greatest possible institutional involvement. At present, besides all the Ministry of Culture's offices and managed institutions (more than 600), the project involves the 20 Regions and coordinates the cataloguing of the resources belonging to local institutions located within their borders and the 77 Italian universities that are cataloguing the digital collections belonging to their museums, libraries and research departments. The important effort made in order to achieve a comprehensive census covering the greatest number of archives, libraries, museums, heritage conservation offices, audiovisual archives and any other kind of cultural institution, both public and private, small, medium and large, is now proving successful. The close cooperation with the project for the Italian culture portal CulturaItalia, which drew from MICHAEL international standards and good practices, guarantees that MICHAEL covers the main Italian public and private digital cultural content providers. On the other hand, through MICHAEL Italy, CulturaItalia is able to identify possible further content providers from various different fields or sectors: these can be public or private, national, regional or local, in charge of cultural activities such as reading, cinema, or live performances, or involved in the preservation and promotion of archival, book, archaeological, architectural, historical, artistic, ethnological, or multimedia heritage, as well as institutes for education or research.

**CulturaItalia – the Italian Culture Portal**

*CulturaItalia’s mission is to communicate the various aspects of Italian culture (arts, archaeology, landscape, cinema, music, literature, architecture, etc.) and create a unique and integrated point of access to Italian cultural heritage:*

- to bring out the digital cultural content and make it visible to an extensive public
- to increase the production of digitised content
- to foster the development of services for tourism
- to contribute to the building process of the European Digital Library.

The work program's strategy foresees:

- close cooperation between the public and private sectors, and among all cultural bodies (museums, libraries, archives, audiovisual archives, conservation and administrative offices; national, regional and local institutions; universities and other ministries, the Italian Church, etc.)
- integration with other initiatives and projects (MICHAEL, MINERVA, national and local portals)
- the application of the most used standards for interoperability (OAI-PMH), metadata description (Dublin Core - DCMI), XML for data representation.

The contents of CulturaItalia are: a catalogue of metadata, editorial content, cultural itineraries, directories of selected cultural websites, a thesaurus that organises the mass of metadata that can be sought in CulturaItalia. Part of the editorial content and the thesaurus are also being translated into English. Multilingual access will be strengthened. New services for users will be available in the future: e-commerce, tourism services, web 2.0 interactions. All contents drawn from external data sources are
imported, in the form of metadata, using the OAI-PMH harvesting protocol. They are published in the portal thanks to a specific application profile called PicoAP, based on the standard international language of Dublin Core, that is able to describe, in one template, every kind, be it physical or digital, of cultural resource. The material made available on CulturaItalia refers to the resources that remain physically in possession of the institutes that are responsible for their creation, validation, management and maintenance. This system guarantees a certain automatism in the import and exchange of metadata and contents from and with other systems, so establishing a development model that is inter-operational among various information systems.

For example, the CulturaItalia portal has been integrated with the different cataloguing systems of cultural heritage (works of art, library and digital heritage) making it possible to research and consult them from a sole access point. The technical work required for adding a new database to the CulturaItalia system consists in the analysis of the database, the mapping of the fields with the CulturaItalia (extended Dublin Core) application profile, the installation of the OAI-PMH repository for the transfer of the data onto CulturaItalia and then the harvesting and publication of the data on the portal. With CulturaItalia, for the first time and on a large scale, the Ministry for Cultural Heritage and Activities creates an access that is integrated on the basis of diversified data belonging to various sectors and achieved with various methods, times and standards. It basically achieves interoperability between the numerous databases developed by the institutes of the Ministry in different sectors and creates a sole point of access to the resources. The great ambition of the project consists in consenting integrated access not only to the databases of the Ministry and its institutes, but also to those of any public or private bodies that want to join CulturaItalia. This operation is possible only if international standards are adopted. In order to enrich the portal content, it is crucial to increase the number of participating institutions. The complexity of management and technical aspects means that there is a need for organizing an articulated workflow, that is:

1) the definition of the agreements with public or private partners, invited to join the project
2) the identification of the data-bases to be harvested
3) the definition of the level of publication of data through the portal
4) if data are provided with DC metadata they can be harvested directly
5) otherwise a mapping between PICO AP (CulturaItalia application profile) and the data model of the databases must be defined
6) the provider installs on its servers a OAI-PMH repository (MiBAC can provide “ready-to-use” technical solutions)
7) the provider creates a script to generate a XML metadata record, exporting values from the databases.

At the moment, CulturaItalia contains more than 2 000 000 data. CulturaItalia is realised in full cooperation between the State and the Regions.

CulturaItalia and MICHAEL are integrated projects.

LIBRARIES

Internet Culturale

Internet Culturale is the portal of the catalogues and digital collections (Biblioteca digitale italiana) of thousands of Italian libraries. It proposes an integrated access system to the digital and traditional resources, in order to promote and enhance the knowledge and availability of the libraries’ heritage at national and international level. The Portal gathers didactic, professional and institutional information concerning the Italian library cultural heritage and related activities. The Portal offers both general and specialized users the opportunity for searching bibliographical information and digital contents taken from different information sources. The services provided by Internet Culturale, including e-commerce of digital content, are available also in English, French, and Spanish. Out of a total of 50 000 documents, the images available from the portal are 9 350 000: 6 850 000 of these concern historic catalogues and 2 500 000 the above mentioned subjects. Internet Culturale also offers access to the SBN (National Library System) database; digitised contents can be searched through the sections Digital Collections (25 in February 2008, for a total amount of 76 979
XML records) and Digital Contents (through which it is possible to search in the repository and the digital database). The portal includes Cultural Routes with the possibility to watch 26 virtual exhibitions in Italian, English, Spanish, and French, dedicated to important protagonists of Italian literature. Moreover, some 3D virtual travels are available and they offer to the users the possibility to move in virtual environments, with “speaking” objects, linked to textual cards. Internet Culturale will also soon be searchable through Culturaltalia. The two portals are thought to be integrated and complementary.

**Biblioteca Digitale Italiana (Italian Digital Library)**
[http://www.bibliotecaitaliana.it/](http://www.bibliotecaitaliana.it/)
The programme Italian Digital Library, promoted by the Italian Ministry for Cultural Heritage and Activities is a platform of initiatives connected to the digitization of Italian bibliographic resources, It was started in 2001 and up to now has included different projects, aimed at protecting, developing and promoting Italian Cultural Heritage, mainly in three areas: music, history and literature, scientific culture. Its main goals are:

- to promote the use of technical standards with a view to integration at European level
- to improve the services offered by Internet Culturale;
- to fund large scale digitisation projects (on manuscripts, incunabula etc.)
- to preserve digital collections.

The Italian Digital Library applies the MAG standard based on international standards such as Dublin Core, NISO and OAIS. MAG was elaborated by the Central Institute for the Union Catalogue of Italian Libraries and Bibliographic Information – ICCU [http://www.iccu.sbn.it/genera.jsp>, that depends on the Ministry for Cultural Heritage and Activities, and has the task of cataloguing the entire national bibliographic heritage.

Within in the framework of the activities of the main committee of the Italian Digital Library, ICCU defined criteria and priorities of new digitisation initiatives that take into account the directives arising from the European debate. The committee decided to continue funding new projects regarding catalogues and inventories, music, photography, sciences, literature, history, and connecting them to existing databases of periodicals and cartographic materials, e.g.:  

**ARCHIVES**

The General Directorate for the Archives of the Italian Ministry [http://www.archivi.beniculturali.it/](http://www.archivi.beniculturali.it/) is elaborating a shared platform named SAN - National System of Archives for the management of all the information concerning the Italian state archives and its administration offices, respectively. SAN will integrate two separate management platforms: SIAS – Information System of the State Archives, and SIUSA – Joint Information System of the Archives Regional Offices.

**SIAS**
[http://www.archivi-sias.it/](http://www.archivi-sias.it/)
SIAS is a database that is being constantly enlarged and which makes it possible to search the complex documentation and relative digitalised inventories and images preserved by the State Archives. Web users can navigate among the State Archives digital resources and choose and save the results of their research directly on the server so that they can recover them from any other terminal. The organizational and technical-scientific coordination of SIAS is entrusted to the Central Institute for Archives. The data descriptions are made according to the international standards ISAD(G) and ISAAR(CPF).

**SIUSA**
[http://siusa.archivi.beniculturali.it/](http://siusa.archivi.beniculturali.it/)
SIUSA is, on the other hand, a main point of access for research on public and private heritage preserved outside the State Archives. It is a system that is constantly extended with new data acquired by the Archive Regional Offices while carrying out their institutional activity of safeguarding non-state archives. It comes into being an open system, from which and towards which it is possible to export and import.
information collected with other systems. On line inventories of non-state archives can be consulted from SIUSA. SIUSA contains descriptions and permits consultation of archive collections with their internal divisions, documentary typologies, producers, institutions and bodies, persons and families who within the course of their activity produced, accumulated, preserved and used the archive documentation described, institutional historical contexts within which the producers have operated, etc.

SIUSA is also an excellent environment for the presentation of thematic projects that result from cooperation between different bodies. Both SIAS and SIUSA are realised in full cooperation between the state and the regions.

CULTURAL HERITAGE

SIGEC
<http://www.iccd.beniculturali.it/cataloguing/information-systems/information-systems?set_language=en>
The Central Institute for Cataloguing and Documentation – ICCD is the body within the Ministry for Cultural Heritage and Activities, which defines the standards and tools for the cataloguing and documentation of national archaeological, architectural and art history, and ethno-anthropological heritage in agreement with the Regions.
ICCD also manages the General Information System for Cataloguing – SIGEC (currently on line available via Intranet only for the Ministry’s experts) contains at present 1 171 259 cataloguing records. This system is constantly updated through the implementation of targeted multi-year projects (for instance, thanks to the lotteries funding, during the year 2007, 27 000 new archaeological cataloguing files were added).

ArtPast
<http://www.artpast.org/> ArtPast was a large long-term digitisation project of the Ministry that was completed in 2007. It had three specific objectives:

• cataloguing: to digitise the paper catalogue cards and the photos of the historical-artistic patrimony according to the national standards of the ICCD, which were then to be integrated in the SIGEC
• distribution of the works: to put them in the Computer System of the Export Offices (SUE) so that they can be connected to the databases of the works that are catalogued, listed, placed on sale by the great auctioneers or stolen
• restoration and documentation: publicising the Computer Archive for the History of the Protection of Historical-artistic Works (ArISTOS) and the Computer System for the Geo-referenced documentation of Restoration sites (SiCaR).

ArtPast contains a collection of about two million works of art, that are available on the CulturaItalia portal:
– 745 811 digitised paper card entries
– 1 838 497 digitised entries that are updated and linked to images
– 20 Export Offices placed online
– over 20 restoration archives explored
– 13 restoration sites involved.

The photography and aerophotography archives
ICCD owns two large archives of pictures: the National Aerial Photography Archive and the National Photography Archive. Both of them are in the process of being digitised; at present, the first one displays on line 130 000 records, the second more than 90 000. Both archives have set up an e-commerce service.

BEWeb, Beni Ecclesiastici in Web
<http://www.chiesacattolica.it/beweb/> BEWeb (Ecclesiastical heritage on the Web) is the on line inventory of the cultural heritage owned by the Italian catholic dioceses; it is an in-progress project under the auspices of the National Office for Ecclesiastical Cultural Heritage and by the Computerized Service of the Italian Episcopal Conference in agreement with the Ministry for Cultural Heritage and Activities (ICCD).
The images and information on line are only a tiny sample of the items owned by the individual dioceses (251,115 items belonging to 172 dioceses). The inventory is based on the ICCD cataloguing standards.

**A2. Progress on the development of quantitative targets for the digitisation of analogue material in archives, libraries and museums, indicating the expected increase in digitised material, which could form part of the European Digital Library and the budgets allocated by public authorities.**

**CROSS-DOMAIN INTIATIVES**

**MICHAEL-IT**

<http://www.michael-culture.it>

The MICHAEL project has a widespread organization in Italy that involves national, regional and local cultural bodies, so forming a thick network of reference points throughout the national territory, belonging to all sectors of cultural heritage. This means that there is maximum institutional involvement due to the active participation of the central and local offices of the Ministry, the mobilisation of the Regions and of cultural institutions throughout the territory, agreement with CRUI (the Conference of Rectors of Italian Universities) and BEIC (the European Library for Information and Culture), integration with the CulturaItalia portal and with other local initiatives, the increasing production of digital contents.

The MICHAEL-IT service intervened where there was a need to set up a transversal national inventory of the digital contents produced by all these bodies in order to make them available for public use. MICHAEL-IT was moreover shown to be essential not only for monitoring the work in progress but also for extracting statistical data on Italian digital collections.

Some examples (updathing: June 2008)

**DESCRIBED DATA IN THE MICHAEL SYSTEM**

- 1 845 institutions
- 3 629 digital collections
- 2 092 services/products
- 1 957 physical collections
- 591 projects/programmes

**MOST DIGITISED OBJECT TYPES:**

- photographs (309)
- paintings (283)
- archive documents (279)
- art objects (230)
- sculptures (227)
- drawings (221)
- archaeological findings and sites (259)
- ancient and modern printed books (236)
- ceramics (136)
- manuscripts (135)

**SISTAN**

<http://www.sistan.beniculturali.it/>

Since 2003, the Statistical Office (SISTAN) of the Ministry for Cultural Heritage and Activities is a component of Egmus, the European Group on Museums Statistics. This team has worked on the following topics:

- a common questionnaire, containing a list of required statistical museum information basic data (1. identification of the museum; 2. opening hours; 3. museum authority; 4. ownership of permanent collection(s); 5. nature of permanent collection(s); 6. attendance; 7. revenue and expenditure; 8. staff; 9. information and communication technology; 10. education programs; 11. publications);
- the EGMUS website.

The common questionnaire defined at the end of 2006, was used by SISTAN for the survey, launched this year, on non-state owned Museums census. Section 9 contains questions on the museums’ web-sites, the digitised collections owned and their on line accessibility.

The Statistical Office usually gathers data about the State Archives and Libraries’ activities, and on attendance at state-owned Museums, Monuments and Archaeological Areas. Nevertheless, in 2007, some actions to start up some parallel surveys on non-state institutions were undertaken and new questions on information technology applied to cultural activities and digitisation (quantitative targets and budgets) will be requested for the 2008 survey.

SISTAN recently joined the European project NUMERIC in order to bring the national statistical indicators into line with the international ones.

<http://www.numeric.ws/>
CULTURAL HERITAGE

INSPE
<http://www.inspe.beniculturali.it>
Since 2003, ICCD has elaborated INSPE, a tool that can be reached through the web and that can monitor all the cataloguing activities carried out by the Ministry's offices (Regional offices in the field of archaeology, art and architecture). At present, more than 90% of the cataloguing activities are carried out through web-based software.

A3. Progress on partnerships between cultural institutions and the private sector in order to create new ways of funding digitisation of cultural material.
Many Italian cultural institutions have set up bilateral agreements with private bodies with the aim of finding new financial opportunities for the implementation of digitisation projects. It must be highlighted that many foundations, in particular bank foundations, are working in this sense (Banco di Sardegna, CARIPOLO, Cassa di Risparmio di Firenze, Fondazione Rinascimento digitale etc.).
The partnership with some Italian Lions Clubs undersigned by the General Management for Library Heritage produced the project “Libro Parlato” (Spoken Book) <http://www.libroparlato lions.it/).
As a result of this initiative, 24 state public libraries are offering people with visual impairments (blind, hyposighted, dyslexic) an integrated system of consultation, download and lending of audio-books that is active in especially prepared positions in each library with specific hardware appliances and application software that is technologically avant-garde. However, all these initiatives are not carried out on a national basis and do not imply large-scale digitisation opportunities but are the responsibility of each single institution. In fact, cooperation between public and private institutions is more frequent for the reuse of digital content and the creation of e-services.
Moreover, there are two other ways for funding digitisation projects:
• national lotteries
• financial resources named “8 per 1000” that originates from the fiscal drag, destined to finance many national cultural institutions and preservation programmes.

A4. Progress on the set-up and sustaining of large scale digitisation facilities.
All the huge national digitisation initiatives listed at point 1 (CulturaItalia, MICHAEL, the Italian Digital Library etc.) imply the digitisation of a critical mass of cultural content.
In 2005, the Ministry for Cultural Heritage and Activities created OTEBAC, the Observatory for digitisation in cultural heritage on the basis of MINERVA products and activities; the aim of the structure is to guide both private and public cultural institutions (museums, archives, libraries, etc.) in the application of quality criteria in all digitisation activities.
In particular, OTEBAC, through an online desk and on site advice, helps cultural institutions and monitors their activities up to the point of the creation of websites; the digitisation of contents is guided through the promotion of the MINERVA Technical Guidelines for Digital Cultural Content Creation Programmes and the MINERVA tools for quality in cultural Web sites. At national level, OTEBAC promotes the application of international digitisation rules and standards. <http://www.otebac.it>

A5. Progress of cultural institutions, as well as publishers and other rightholders to make their digitised material searchable through the European Digital Library. Describe in particular the progress on the application of common digitisation criteria by cultural institutions and, where relevant, private companies, in order to achieve interoperability with the European Digital Library and to facilitate cross-language searchability.

CROSS-DOMAIN INTIATIVES
During 2007 the national standards used in the library and cultural heritage sectors (MAG, ICCD standards) were mapped with a view to the application profile of the Italian Culture Portal - CulturaItalia in order to assure the interoperability between the portal and the large number of national and local databases. Since the CulturaItalia application profile is based on the extended version of Dublin Core, it will be possible to easily interconnect the databases shown through the Italian Culture Portal with other systems using DC and OAI-PMH, including the European Digital Library.
In this sense, CulturaItalia can be considered the Italian aggregator of the digital cultural resources.

**CULTURAL HERITAGE**

ICCD is the institute responsible for the definition of the national cataloguing standards for the archaeo-logical, architectural, historical, art history, ethno-anthropological and multimedia heritage. These schemata have been mapped with Dublin Core. The almost total use of the OAI-PMH protocol for the harvesting of the metadata in all cultural sectors ensures the interoperability of the databases, especially in view of the establishment of the European Digital Library.

**LIBRARIES**

The leading committee of the Italian Digital Library established standards for the national digitisation projects according to the prescriptions of the Digital Library Federation (DLF). The main metadata standard applied in the Library sector is MAG. MAG stands for Administrative and Managerial Metadata and was elaborated by ICCU for defining a protocol for the collection and transfer of the metadata and digital data into the archives. MAG also refers to Dublin Core for the descriptive part of the metadata [http://www.iccu.sbn.it/genera.jsp?id=105]. Entirely based on international standards such as Dublin Core, NISO and OAIS, the XML specifics of MAG provide operators with an application profile similar to that of METS of the Library of Congress and totally adaptable to the digital resources to be managed.

The use of MAG moreover ensures the independence of the metadata from privately owned software solutions and therefore a greater stability and better conservations politics of the digital objects.

**PUBLISHERS**

ICCU made an agreement with an important Italian publisher, Laterza: this guarantees the right of the institution, free of charge, to digitise and publish the entire book collection “Italian Writers”. Furthermore, many private cultural institutions such as Alinari Archives and the Italian Touring Club, and publishers, like Electa, are offering for public fruition some of their digital contents through CulturaItalia – the Italian Culture Portal. This is possible thanks to bilateral agreements with the Ministry and the application of a special licence model.

Finally, AIE, the Italian Publisher Association, has been involved in the activities of the Ministry regarding the problems connected to IPR and copyright, in particular to digital assets. In fact, AIE’s representatives are now cooperating with the MINERVA eC working group on copyright issues that will produce a specific handbook on the subject by the end of the year.

**A6a. Progress on mechanisms to facilitate the use of orphan works.**

**A6b. Progress on mechanisms to facilitate the use of works that are out of print or out of distribution.**

The issues concerning the use of orphan works and the drafting of lists of orphan works, as well as the use of works out of print or distribution and the drafting of lists of works in the public domain, is one of the main questions in the setting up of user oriented services. Therefore the DG for Libraries, officially in charge of copyright works, is working on this matter very seriously. Up to now the Model agreement for a licence on digitisation of out of print works edited by the I2010 High Level Group (Copyright subgroup) was used as a reference. A working group of experts is being set up to deal with all the related issues. ICCU has translated the following documents into Italian:

- the Model agreement for a licence on digitisation of out of print works [http://ec.europa.eu/information_society/activities/digital_libraries/hleg/hleg_meetings/index_en.htm]
- the Report on Digital Preservation, Orphan Works, Out-of-Print Works, Selected Implementation Issues (Relazione sulla conservazione digitale, le opere orfane e le opere esaurite. Aspetti concreti legati all’attuazione)
A6c. Progress on the availability of lists of known orphan works and works in the public domain. MILE project - Metadata Image Library Exploitation

MILE is an EC funded project that aims at improving the use, accessibility and trade of digital images throughout Europe. Among the other activities, MILE set up an ‘Orphan Works Database’ which acts as a repository for all Orphan Works and invites visitors to offer information about those works. This database also serves to collate all search efforts for associated works of art so that Europe is provided with a centralised source for Orphan Works discussions, search history and potential repatriation. The Italian partner is Alinari, the largest photographic national archive.

A6d. Progress on the identification of barriers in your legislation to the online accessibility and subsequent use of cultural material that is in the public domain – and the steps taken to remove them.

Recently the article 70 of the Italian law on copyright (law 633/1941) was modified in order to allow the non-profit free spread of low resolution images and sounds on the Internet for teaching and scientific purposes (law 2/2008). Generally speaking, every cultural institution, in particular museums and galleries like the National Gallery of Modern and Contemporary Art, because of the strict limits of the copyright legislation, adopted different solutions elaborated from time to time through specific agreements with the rights’ owners. The Ministry for Cultural Heritage and Activities has prepared a framework agreement with content providers for defining the portal access modalities.

B. DIGITAL PRESERVATION

B1. Progress on national strategies for the long-term preservation of and access to digital material.

Describe the organisational approach, indicating the roles and responsibilities of the parties involved as well as the allocated resources. Describe the specific action plans outlining the objectives and a time-table for the specific targets to be met.

LIBRARIES

The General Directorate for Library Heritage established that the low resolution digital content produced by the Italian libraries must be given to ICCU, and the high resolution content to the National Library of Florence.

Targeted projects: the National Library of Florence is working on the “Digital Stacks Project” that is concerned with the long-term preservation of digital material. The project’s aims are to store a large amount of data as well as to evaluate the effects of the rapid obsolescence of new electronic technologies. Based on the experience of the two large existing digital archives Google File System and Internet Archive Petabox, the structure of the “Digital Stacks Project” is based on a combination of largely used components, such as personal computers and SATA disks. The first stage of the Project is being developed in three areas:

• preparation of a scalable hardware and software infrastructure, increasable over time and able to guarantee data integrity;
• application of the OAIS model, taking into consideration existing data management and archiving technologies;
• identifying the necessary requirements for an organization to achieve certification at international level as a Trusted Digital Repository.

The second stage of the Project aims at the application of the emulation strategy using open-source technologies in order to make available – through the Library’s OPAC – those “vintage” CDs produced in the late 1980’s.

ARCHIVES

ReDigit

The ReDigIt network aims at the establishment of a national network of centres of local and national responsibility for the preservation and protection of public and private digital documentary heritage. The objectives of ReDigIt can be summarized as follows:

• encourage local and national policies;
• define strategies;
• promote suitable knowledge and skills;
• offer itself as an Italian reference point at international level.
ReDigIt aims:
• at carrying out research in critical sectors of digitisation (metadata for digital preservation, open archives, models of accredited digital deposits, definition of requirements for specialized software for document production and management, etc.)
• promoting awareness and information initiatives on the subjects of automatic treatment and preservation of digital memories
• organizing high level formation interventions
• defining meeting/encounter activities aimed at promoting the adoption of new technical/organizational solutions and the sharing of the best experiences achieved at regional, national and international level with special reference to the organizational nodes and operational solutions to be used
• analysing existing information sources
• promoting research activities in more complex sectors with specific reference to digital conservation
• providing inter-institutional advice and cooperation regarding both the technological and organizational aspects linked to the themes of digital management and preservation
• providing operational and financial support for concrete research and development experiences (for example InterPARES 3).

The methodology that ReDigIt means to use aims at the preparation of technical-scientific relations on the requirements for the development of information systems and the promotion of experiences already in progress.

The current state of implementation of ReDigIt is at proposal level; during 2007 two projects for financing were presented respectively to CIPE within the sphere of the mixed Commission MUR-MiBAC for digitisation interventions to be carried out with the coordination of the Ministry (estimated budget, 1 000 000 euros for three years of work) and to MUR (PRIN project) with the specific objective of creating a research network with the coordination of the University of Urbino, for which a total budget of 900 000 euros was requested. ReDigIt involves participation of various types of institutional partners: universities (Universities of Urbino, Macerata, Padova, Roma Tor Vergata and Milano Politecnico), ministerial (Ministry for Cultural Heritage and Activities; General Directorate for Archives, National Central Library of Florence, National Marciana Library of Venice, ICCU), local authorities (Emilia Romagna Region, Tuscany Region), professional associations (Unioncamere, ANAI).

Italian TEAM InterPARES 3
<http://www.interpares.org/>

The second initiative already under way regards the creation of an Italian TEAM (Theoretical Elaborations into Archival Management) within the sphere of the InterPARES 3 project. Its objective is implementing the theory of preservation of authentic records in digital systems in small and medium-sized archival organizations.

The Italian TEAM has already begun work and is assisted by the participation of experts from various institutional sectors such as universities, local bodies, professional associations, central institutes of the Ministry.

The InterPARES 3 project (International Research on Permanent Authentic Records in Electronic Systems, 2007-2012) aims at developing the knowledge essential to the long-term preservation of authentic records created and/or maintained in digital form and providing the basis for standards, policies, strategies and plans of action capable of ensuring the longevity of such material and the ability of its users to trust its authenticity.

The InterPARES 3 objectives are:
• definition of conceptual and terminological framework that is coherent with the principles of diplomacy and archiving
• definition of a work model (authenticity control, acquisition, selection, preservation management in deposits, description) according to the OAIS standard
• definition of recommendations and standards for digital archives produced within the sphere of e-government, scientific research and cultural production
• specific analysis of the requirements for the preservation of documents produced in a dynamic and interactive environment.

DOCAREA
<http://www.docarea.it/>

The DOCAREA project aims at demonstrating how the organization and rationalization of the back-office is an important prerequisite for the production of effective services for citizens and businesses, while respecting legislation, safety of transactions and privacy.
Apart from the Ministry for Cultural Heritage and Activity, DOCAREA also works with numerous Italian Regions in cooperation with the Province of Bologna, for a total involvement of over 250 public administrations. The project creates the technological and organizational infrastructure of a documentary back office for sharing technical and methodological organizational solutions that cover the whole life cycle of the documents, from their creation to the management of the current archive, to the use of digital signatures to their final filing and their long-term preservation.

**Istituto centrale per il restauro e la conservazione del patrimonio archivistico e librario**

<http://www.cflr.beniculturali.it/>  
<http://www.tape-online.net/>  
Within the area of the archive sector, the Istituto centrale per il restauro e la conservazione del patrimonio archivistico e librario – Central Institute for restoration and preservation of the archives and libraries’ heritage (formerly Centro di Fotoriproduzione, Legatoria e Restauro - Centre for photo-reproduction, bookbinding and restoration) of the Ministry for Cultural Heritage and Activities acts as a reference point for the Italian State Archives in the sphere of long-term preservation of digital memory. It is directly responsible for the digitisation of the heritage and the management of the digital libraries of some state archives, but it is also involved in research activities in the area of preservation both at national level (the OPTIMA project, Jpeg 2000) and at international level (it is, for example, a partner in the TAPE and InterPARES projects).

**B2. Progress on exchange of information with other Member States on your strategies and action plans.**

**CROSS-DOMAIN INITIATIVES**

**Digital Preservation Europe**  
<http://www.digitalpreservationeurope.eu/>  
The General Directorate for Library Heritage participates, together with other important Italian libraries and institutions (ICCU, National Library of Florence, National Library of Venice “Marciana”, Digital Renaissance Foundation, the university consortium CILEA) in the Digital Preservation Europe coordination action. This ensures that the guidelines that are shared at European level are followed by Italian libraries. In fact, Digital Preservation Europe (DPE) fosters collaboration and synergies between many existing national initiatives across the European Research Area. DPE addresses the need to improve coordination, cooperation and consistency in current activities to secure effective preservation of digital materials from all the cultural sectors.

**B3. Progress on legal provisions for multiple copying and migration of digital cultural material by public institutions for preservation purposes.**

For this activity, each cultural institution follows its own approach.

**B4. Progress on policies and procedures for the deposit of born-digital material. Please note how you are taking into account developments in other Member States in order to prevent a wide divergence in depositing arrangements.**

**LIBRARIES**

**Magazzini Digitali project**  
<http://www.rinascimento-digitale.it/indexEN.php?SEZ=228>  
As far as the legal deposit is concerned, the National Library of Florence coordinates the project Magazzini digitali (Digital repositories) in cooperation with Fondazione Rinascimento Digitale; the initiative also involves the National Library of Rome. The aim of the project is to create a system for the archiving of the born digital content. The standards applied are: ISO 14721 for the preservation methodology, ISO/IEC 27001:2005 for the security of the information, and the criteria defined by RLG – NARA in *Criteria for Measuring Trustworthiness of Digital Repositories & Archives: an Audit & Certification Checklist* TRAC for the certification of the repositories. As a result, each born digital content will be preserved in three copies: the first one will be deposited in the National Library of Florence, the second one in the National Library of Rome, the third one in the dark archive.

**ARCHIVES**

**PAR-ER project**  
As far as the archive sector is concerned, the PAR-ER project can be highlighted as good practice to be extended
at national level. PAR-ER is an initiative that foresees the creation of a unique digital archive for the deposit of the documentation produced by all offices (including libraries, museums and other cultural institutions) depending on the public administration of the Emilia-Romagna region; the macro-objective is to avoid the duplication of efforts and foster the reduction of the digitisation and preservation costs for the public administration. The Emilia-Romagna region and the Province of Bologna elaborated PAR-ER that will be completed at the end of December 2009 with the creation of a regional pole for archiving. PAR-ER takes into account international standards for the preservation and management of digital content, in particular OAIS for the archiving of a document and the management of the descriptive and conservative metadata.

**B5. Progress on legal provisions for the preservation of web-content by mandated institutions**

**NATIONAL RULES**

At the moment a set of rules has been proposed to CNIPA – National Centre for Informatics in Public Administration - for approval. These are known as “Proposal of technical rules regarding formation and conservation of computer documents”. It will be issued as a Ministerial Decree of the Department for the Public Function of the Ministry for Innovation to fulfil articles 22 c. 4 and 71 of the Code of Digital Administration. This decree is aimed at the subjects of public legislation and subjects of private legislation, only in regard to their activity of public interest and private citizens in their relations with public administration. The Commission that prepared the document followed the criteria of drawing up general rules that must control the activity of formation and conservation of computer documents, without referring to technical aspects which are usually very dependent on the specific context and on technological evolution, leaving the subjects involved free to adopt procedures and techniques considered more appropriate, as long as they respect the general rules. The main topics dealt with in the decree will regard the formation of the computer document, the replacement reproduction of analogical documents and the relative formats and supports for memorizing, the exhibition modalities and technical guides.

**LIBRARIES**

The preservation of web-content is now available for experimental trials by the Italian law on legal deposit (law 106/2004, Dpr 252/2006). The National Library of Florence has drawn up an agreement with the Internet Archive Consortium for setting up a crawler harvesting the web domains .it. The archived web-content is not yet freely available.