

# Luxembourg

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The reorganisation of Government after 2004 elections had a major effect on the project "eCulture" of the Ministry of Culture, Higher Education and Research. The responsibilities in Government changed as the competences for digital affairs had been transferred to the Ministry of Civil Service and Administrative Reform. The former National Board for the Information Society was dissolved and replaced by the "Coordination Committee for the Modernisation of the State". The objective of these changes was to insure coherence and better visibility in general. But it also meant that the representative of the Ministry of Culture, Higher Education and Research is not directly involved anymore. In line with the Lisbon strategy of a knowledge-based economy and society, Government finalised the action plan on electronic governorship and continued to provide not only means for use of information and communication technologies but also for the coverage of a wide range of projects. Initiatives dealing with the creation of thematic portals on the one hand and, on the other hand, projects incorporating transversal themes in different domains were welcomed. Working groups on important transversal projects had been created: projects to guarantee access to the universe of knowledge for everybody, projects on public key infrastructure, on developing information highways, on archiving public documents or on intellectual property, among others. Nowadays the management plan for e-government continues focusing on administrative modernisation and electronic access to main public services. The project covers six action areas: organisation and management, contents and services, education and training, technologies and infrastructure, security and private life, and legal framework. Three different types of projects have been identified: short-term Internet projects (e.g. public submissions), short-term administrative management projects (e.g. agricultural police record), and short- and long-term strategic projects (e.g. interoperability). The electronic

governorship means the whole panoply of measurements or decisions which contribute to define the framework in which evolve the society of knowledge, the electronic administration and, more generally, new technologies of communications. The strategic objectives are transparency, inclusion and participation, efficiency and effectiveness, economic competitiveness, knowledge and conformity embedded in the framework defined on the level of the international organisations. Initiated in 2004 to improve the quality of the projects concerning the implementation of communication and information technologies in the Luxembourg administration, the project "QUAPITAL – QUALité des Projets d'Implémentation des Technologies de l'information dans l'Administration Luxembourgeoise (Quality of the Projects of Implementation of Information Technologies in the Luxembourg Administration) determines a methodology of project management common to all actors of the State. It constitutes a major pillar within the framework of the management plan for e-government objectives. A second project in the framework of e Government is the "Single Counter for Citizens" - a project defined as a unified virtual space whose main objective is to allow a simplified and transparent access to information and public services for the citizens. Actually, according to a survey realised by Eurostat; 55,2% of Luxembourg's Net surfers say that they have used Internet for getting information on public authority. On European level, only Finland (61,4%) and Sweden (59,8%) have a better score. In downloading public forms, Luxembourg takes the first place in Europe with 46,3% of the Internet surfers in Luxembourg and again the third best score in sending comprehensive public forms to public authority. In 69,6% of the households, a broadband access was installed. These figures underline that Luxembourg is moving from a "paper" public authority to an "electronic" public authority.

Another important project focuses on raising awareness about information on security and the spreading/circulation of information. It aims to draw the attention of all citizens (children included) and of small and medium-sized enterprises to the abuses and misuses related to the new technologies of communication, in particular those of Internet and mobile telephony. Three methods were elaborated to approach the security of information and communication systems and networks: the theoretical one, the practical one and the one about the risks. International partners from Belgium, Germany and Switzerland have been associated to the project.

It is worth mentioning projects, for example, developing an information highway, the electronic commerce or the protection of information.

Other public players made also progress and launched several projects in the digitisation field. Among those, the City of Luxembourg is very active and acquired special equipments for audiovisual material and an integrated system of information data bases. In the cultural domain, it is worth mentioning the digitisation of the collections of the Luxembourg City History Museum and the City's archives as well as the cross-border city-network "Quattropole" realizing common cooperation and mutual collaboration as well as exchange with the bordering countries.

As stated before, the Ministry of Culture, Higher Education and Research has not any representative in the CCME anymore and its interests are defended by the government agency "eLuxembourg".

This agency tried, in close collaboration with the Ministry of Culture, to give a stimulus to the cultural sector by according priority to two main projects called "Cultural Portal" and "Digitisation of the national cultural heritage". Both projects are coordinated by a steering committee.

"Cultural Portal" should introduce cultural events and contacts, information about cultural heritage, news and information on finances and logistics for cultural activities. The project is understood as a strategic one. "Digitisation of the national cultural heritage" is the project closest to the philosophy of MINERVA. MINERVA recommendations, guidelines and good practices were very useful for setting up the national project.

At first the cultural institutes will take priority over cultural associations and other cultural actors.

A main concern is to avoid the production of an overabundance of information but to create a knowledge database, which is not only set on sophisticated technical work but that will serve as guidance catalogue in the usage of the information provided by informatics in general.

The missions of our different cultural institutes have been newly defined by the Law of 5 June 2004 bearing reorganisation of the Government's cultural institutes and ratifying the sector of scientific research not only of the National Museum of History and Art and of the National Museum of Natural History but also of the National Library.

Each cultural institute has of course its own specific missions, but the more general assignments are the same; the study, the conservation and the diffusion of the cultural heritage as well as growing public awareness, education and training.

One of the first missions is to define the role of digital technologies in working fields such as preserving, documenting, archiving, visualising, presenting and analysing (built and non-built cultural heritage) the characteristics of documents, paintings, monuments and other cultural objects.

A next step consists in finalising the inventory of the multitude of scientific catalogues. The diversity of the implied cultural actors is characterized by the conceptual, technical and financial approaches which are of course never the same. A comparative list of ongoing projects and progress realised in the different sections will help to choose the appropriate technologies, to fix a road map in accordance with the budget at disposal.

The Ministry of Culture, Higher Education and Research of Luxembourg is a most important actor and therefore has continued, for the last few years, its coherent and efficient strategy to coordinate the project. Long-term preservation of cultural heritage means to record collections in digital form to ensure their conservation and management and to make them accessible not only to specialised researchers but also to the greater public. Collaboration with research centres such as the National Library, the National Museum of History and Art, the National Museum of Natural History and so on, was strengthened as was their relationship with the Ministry of Education and vocational training and the Ministry of the Economy and Foreign Trade, for example.

The cultural institutions try to maintain their identity but work also, by referring to common standards and new technologies, to create a common thesaurus and to define a common vocabulary to guarantee interoperability. The creation of one single cultural portal is not necessarily a successful mean in order to work together and to share knowledge. Subject-related portals with a common, introductory portal could be an alternative. All cultural institutes as well as associations and foundations should be integrated in order to cover all cultural fields.

The staff must be trained so that they can rise to the standards required in order to allow the setting-up of a homogeneous inventory of collections, for example. And an absolute must is the collaboration with the research centres of the University of Luxembourg, the City of Luxembourg and the partners in the so-called "Grande Région".

### **The library sector**

The major investor in this domain is the National Library of Luxembourg. This cultural institute aims to play a very active role in the development of a highly effective "knowledge society" in the Grand-Duchy. The National Library differentiates its missions whether they belong to the heritage library or to the scientific and research part of the library.

The library's priorities in digitisation are the development of electronic instruments, the placement of documents at the disposal of the portal to go online, the creation of digitised material from the digital fund "Luxemburgensia", the development of a policy of communication towards the public, the enlargement of the network of Luxembourg libraries (actually some thirty libraries are managed by the National Library through its network) and the training of library staff. The volumetric data entry of the Luxembourg collections has priority and their digitisation is a medium-term objective.

Since 2002, the National Library has continuously developed a centre of information and communication technologies. More than 50.000 pages are now available on Internet and efforts on the digitisation of the Luxembourg press are important. The registration of copyright has been introduced by the Law of 5 June 2004 concerning the reorganisation of the cultural institutes.

### **The audiovisual sector**

The National Audiovisual Centre has been entrusted with the tasks of safeguarding, developing and promoting the Luxembourg audiovisual heritage. They produce audiovisual documentation from material of national interest and they encourage the public's interest and skills in using audiovisual tools for cultural and educational ends. The National Audiovisual Centre archives include all the long and short films (fiction and documentary) produced, or co-produced, on celluloid in Luxembourg - from the first film made in the Grand-Duchy in 1899 up to the most recent productions.

In order to ensure their preservation, but also to facilitate access while allowing a non-damaging use of the sound archives of the recording library, the National Audiovisual Centre has begun with the digitisation of all its material. Digitisation is a huge undertaking considering that the programme of digitisation involves some 15.000 hours of video recordings, some 6.000 hours of sound recordings and some 300.000 photographs. Therefore, it is determined to develop a strategy to safeguard the national audiovisual heritage and is trying to create a partnership with the private sector.

Within the framework of the governmental programme e-Luxembourg, an Internet site was created and the work of digitisation began in 2003. It is expected to last eight years. The National Audiovisual Centre signed a contract with a private company to organise the conservation and management of sound archives and to ensure their optimal use, especially within the area of Luxembourg audiovisual production. The major difficulty in the progress of the project is to centre these three areas of audiovisual material (film/video, photograph and sound) into one single database. Indeed, every type requires a specific approach and it will be extremely difficult to carry out digitisation without setting up three different databases.

A big step forward to realise digitisation, conservation and safeguard of the audiovisual, sound and photographic material of the Centre is the agreement of partnership with a private partner. The public-private agreement will guarantee the adaptation of the newest systems of conservation to the most recent technical and technological developments, especially by proceeding to the digitization as well as the storage and the data-processing management of existing State contents and of those to be acquired in future.

## The Museum sector

In the museum sector, the National Museum of History and Art and the National Museum of Natural History are the key players in digitisation affairs. The National Museum of History and Art continue its work of establishing a common scientific catalogue including all their different sections: archaeology, plastic arts, folk, numismatics, etc. The archaeology section is actually the most advanced one in the field of digitisation. Especially, the irretrievable destruction of our historical and cultural heritage, due to a growing building activity, is a reason to focus on the GIS-supported database that is being developed in the 'Environment and Cultural Heritage' (EPC) Project - the 'Living Tomorrow in Luxembourg' programme, where different ministries as well as cultural institutions are involved in the coordination group. Numerical 3D is a privileged tool of research and dissemination of the information. Efforts are undertaken to include other national or regional museums in the process. First initiatives have been launched and the collaboration sounds promising. The National Museum of History and Art would coordinate all departments on a national level except the one concerning nature which is under the responsibility of the National Museum of Natural History. The National Museum of Natural History developed the natural history gateway LUXNAT and focused on Recorder 6 for the recording and reporting of field observations of taxa and biotopes. The National Museum of Natural History is the national centre for natural heritage information in Luxembourg and the national centre for biological data access at a European level in the BIOCASE project. The creation of a national bio- and geo-diversity web portal to make information accessible to a larger public is another concern of the museum. The realisation of new collection modules for the data base confirmed the need of having at disposal a management tool for bibliographical references by key words based on a thesaurus.

## The public records sector

Today archivists are confronted with various challenges in view of a considerable increase in the volume of files having to be analysed and then sorted out or filed for a long time. Therefore the National Archives have

to invest in methods and tools, which are appropriate for the requirements of the information era. The Government' initiative on archiving public documents quickens the progress in the public records sector. Besides, giving the priority to documentation concerning "civil status, decennial tables and parochial registers", as well as the "notaries" and the "plans and charts", the National Archives launched an initiative on collaboration between different archive institutions in the North of the country by involving local authorities. Another project deals with the ARBED archives covering the period from 1911 to 1990; this work is realised in collaboration with the Centre on European Studies and Research and should be finished at the end of the year.

The National Centre of Literature, only 10 years after its creation, was successful in developing into an important centre of resources concerning Luxembourg' literature and scientific research in the cultural landscape of the Grand Duchy. The Centre contributes in a large scale to the valorisation of our cultural heritage, referring to our literary history as well as supporting today's literary creation. Due to hard work, especially while updating of the system of cataloguing, the whole literary library is accessible on-line.

The connexion to the network created by the National Library allows active contribution to the common database of almost 30 libraries. The Centre worked also on the finalisation of the inventories of its collections. The "current bibliography of Luxembourg literature" is one of the most visited information points on the Centres' Web. Together with other cultural institutes, the CNL actively participates in the 'Environment and Cultural Heritage' (EPC) Project - 'Living Tomorrow in Luxembourg'.

Great attention is given to our national language, the "Lëtzebuergesch". A special commission is dealing with all aspects of this important cultural heritage. Research focuses on the creation of an interactive on-line version of the "Dictionnaire pratique de la Langue Luxembourgeoise". A first edition is scheduled for next year and the complete work should be finished in about five years. The database on knowledge concerning the Luxembourg language foresees a thesaurus of five different languages: Luxembourgish, English, French, German and Portuguese. Being updated regularly on XML-technology, it also constitutes a flexible tool that allows

being completely independent from commercial products. International cooperation has been set up with research institutions working in the field of Lexicography.

### **The monuments and historic sites sector**

The digital work on national monuments and historic sites is an ongoing process in the Department of cultural heritage. The project of an own website has been reported due to some technical difficulties, but the data base management system called "Simona", a light version of former "INPAC", is nearly ready. The classification covers five fields: rural and urban (town planning and rural heritage); feudal and fortified (restoration and re-animation – fortified towns and boroughs, - the Fortress of Luxembourg); religious (monasteries and convents - chapels - churches - wayside crosses - hermitage - sources and trees); craftsmen and industrial - landscape. A special effort is dedicated to the digitization in 3D-format. The Department of cultural heritage is also involved in the conservation and valorisation of the blast furnaces in the South of Luxembourg. The Government decided on 18 February 2005 to integrate them in the City of Sciences so that they serve as a reminder of Luxembourg's industrial past to future generations. The three major objectives of this project are: to document the iron and steel industry, in particular the production of the cast iron in its technical, historical and sociological aspects; to preserve the shape of the site and to create new activities. The respect of historic substance is the guarantee of for long-term conservation.

### **The education sector**

In the education sector, it is important to mention the ICT-Integration strategy in primary and secondary schools. In the early 1980s, the Ministry of Education and vocational training started dealing with ICT in schools. Being aware that ICT constitutes a tool for teaching and learning, the Department of coordination of research and of innovation (SCRIPT) in teaching and technology was set up in 1993 to coordinate research and the innovation programmes in various teaching fields including that of the integration of technologies of information and communication. A specific portal "Myschool", was created

for the scholars as well as for the pupils and the project has been improved several times by integrating information on education and life long learning. The SCRIPT is collaborating very closely with the Department of Higher Education and the Department of Research of the Ministry of Culture, Higher Education and Research.

### **The research sector**

The Virtual Resource Centre for Knowledge about Europe is a Luxembourg-based public undertaking under the aegis of the Ministry of Culture, Higher Education and Research.

The CVCE has created a platform for the research, gathering, selection, processing and dissemination of digital content covering our cultural heritage. The European Navigator (ENA), the CVCE's flagship is an important initiative in order to create a digital library that provides multimedia content to its users. The primary task of the CVCE is to research, create and select relevant multimedia material on European integration in its widest sense. ENA is freely available on the Internet at [www.ena.lu](http://www.ena.lu) and can be accessed through interactive terminals installed in both national and Community institutions. The CVCE is also involved in digitisation work of the Ministry of Culture, Higher Education and Research.

### **Unesco Luxembourg**

Luxembourg joined the Organisation on 27 October 1947. In 1994, UNESCO added the 'City of Luxembourg: its Old Quarters and Fortifications' to the Memory of the World Register. The presence of a cultural site on the list of the World Register is recognition of its outstanding value by the world community. The site belongs to the world community from that point onwards, while the country in question is obliged to protect, manage and valorise the site. At this moment, Unesco Luxembourg's major concern is the integration of the "Saint Willbrodus "jumping" procession of Echternach" in the world heritage of immaterial heritage.

### **EGMUS**

Jointly coordinated by France, Germany, Luxembourg and The Netherlands, the European Group on Museum

Statistics (EGMUS) provides politicians, policy makers, and cultural workers in Europe with much needed information on museums. Until now the picture of European museums is fragmented, to put it mildly. Reliable and comparable data are a prerequisite for a more comprehensive view on the museum sector in Europe. EGMUS is an independent body, accepted as an informal working group in the framework of the European Working Group on Cultural Statistics of the Statistics Office of the European Union (Eurostat). Initiatives from EGMUS are included in the reports, recommendations and conclusions of the Working Group. The members of EGMUS are from the Member States which participated in the former European "Leadership Group (LEG) on Cultural Statistics in the EU" and the subsequent Working Group on Cultural Statistics. The latter consists of representatives from the Ministries of Culture, statisticians and experts working in or with museums. Major activities consist in collecting available data from national museum surveys and other sources, the elaboration of a common methodology and a common survey questionnaire. The principal aim of EGMUS is to produce relevant, coherent and comparable statistics on museums at European level. Questions on digitization are actually a priority in the work of EGMUS, which can provide reliable information in this specific area.

The large panel of projects concerning the conservation of our cultural heritage contributes to a large scale to the Society of knowledge and to the objectives of the Lisbon strategy. Each one of our national cultural institutes constitutes one tiny stone necessary to make up the mosaic called "the European Digital Library".