Lithuania
Danutė
Mukienė

The Development of the Lithuanian Integral Information System for Automated Stocktaking, Digitisation, Preservation, Search, and Access to Museum Assets

In March 27, 2001 by order of the Minister of Culture of the Republic of Lithuania a working party was set up to prepare the concept and model for computerising the collections of the Lithuanian museums; therefore, it may be considered as the beginning of digitisation of Lithuanian cultural heritage. The group consisted of highly experienced museum specialists who together developed a concept for digitisation.

In 2002, the Lithuanian Art Museum (hereafter LAM) joined the EUREKA project MUSEUM ONLINE CATALOGUE (MOC) initiated in the Baltic States by the National Museum Board of Latvia. Apart from the above-mentioned institutions we have partners from the Estonian Ministry of Culture and IT companies from the three Baltic States: the joint-stock company "ALNA" (Lithuania), GenNet Laboratories Ltd. (Estonia), and IT Consulting Ltd. (Latvia).

With some financial support from the Lithuanian Ministry of Culture, in 2004-2008 the LAM together with JSC ALNA developed and introduced the Collection Information System (RIS) and the Integral Collection Information System (IRIS). Both RIS and IRIS made it possible to computerise the stocktaking of collections, along with storing, managing and control of data about museum collections. In addition to that, it enabled LAM to provide data for museum specialists and Internet users as well as to ingest content to the national portal of Lithuanian cultural heritage www.epaveldas.lt (initiated in 2005). Public access to LAM's electronic catalogue www.rinkinys.ldm.lt/iris was provided and is operational today.
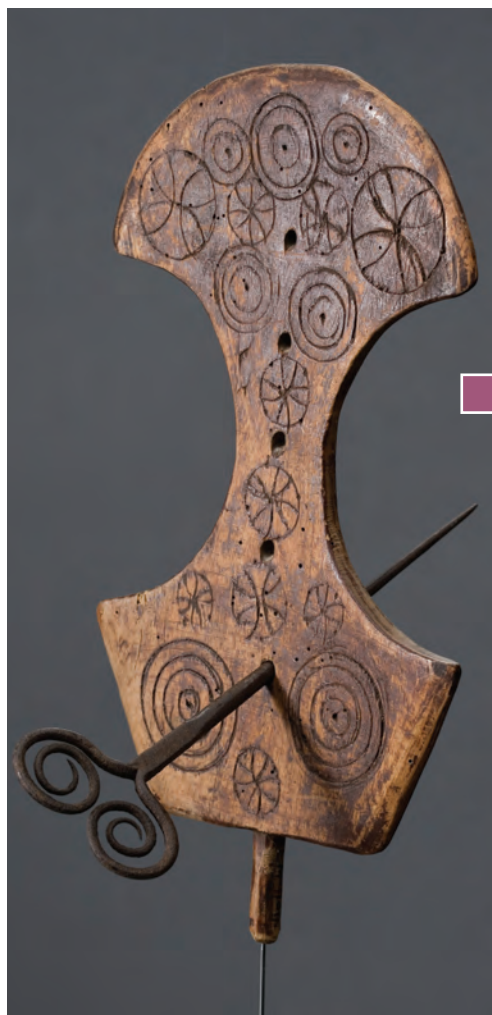
There is already some basic data on more than 156 thousand exhibits in the LAM RIS database. In 2008, RIS was installed and adapted in the Vilna Gaon State Jewish Museum, along with the M. K. Čiurlionis National Art Museum. Several other Lithuanian museums have their own collection information systems but these are not suitable for digitisation of exhibits.

Another important motivation for further development of the digitisation processes in Lithuanian museums were the resolutions *On the Affirmation of Strategy Concerning the Development of Information Society* and *On the Affirmation of*

Juozas Mažvydas.
Small Distaff with a Pin.
Ca. 1935.
Wood, h 31.5 cm;
Property of
Lithuanian
Art Museum.
Inv. nº LM-1101
Photo by
Antanas Lukšėnas

a Concept Concerning the Digitisation of Lithuanian National Heritage that the Government of the Republic of Lithuania passed respectively on June 8 and August 25 of 2005. This underlying concept proposes the following guidelines: favourable circumstances should be introduced for the initiation and development of the strategy along with the programs and projects dedicated to cultural heritage digitisation, and for the coordination and monitoring of their implementation, ensuring the continuous

The front-page of
LM IDC LIMIS Website
"Digitisation of
Museum Valuables"

progress of digitisation in libraries, museums, archives and other institutions directly involved in the preservation of cultural assets.

The Ministry of Culture and the Ministry of Education and Science of the Republic of Lithuania together with Information Society Development Committee and Lithuanian Archives Department (both under the Government of the Republic of Lithuania) were entrusted with the coordination and constant monitoring of the digitisation of cultural heritage.

The aim of cultural heritage digitisation is to digitise unique and valuable cultural heritage objects along with information about them, the main objectives being first, *to create an integrated information system of Lithuanian cultural heritage based on homogeneous standards and infor-*

mation usage agreements that would ensure the long-term preservation of and access to digitised information[1]*;* second*, to enable the long-term preservation and usage of cultural heritage by providing its digital copy and information about it* [2]*;* and third*, to promote and disseminate Lithuanian cultural heritage among diverse world cultures, and to contribute to the development of an integral information field of European cultural heritage*[3].
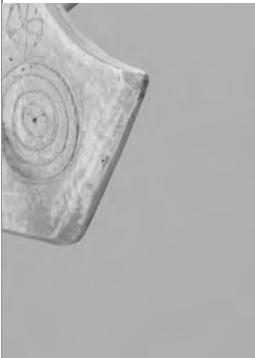
The concept indicates that upon deciding which objects are to be digitised the following criteria should be applied: uniqueness, content and value, physical condition and age. The urgency to further develop the digitisation process in Lithuanian museums is clearly stated in the resolution *On the Affirmation of the Museum Modernisation Program in 2007-2015* passed on March 14, 2007 by the Government of the Republic of Lithuania. In this document, it is emphasised that there is still no integrated museum information system, which is why sharing information, searching collections and exchanging them is virtually impossible. As fundamental to the strategy, the resolution designates its crucial objective, namely *with the help of modern means and technologies, to bring museum collections up-to-date and to familiarize society with the digitised cultural heritage along with information about it* [4].

Another impulse that prompted museums to join the process of digitisation of cultural heritage was the resolution *On the Affirmation of the Strategy Concerning the Digitisation of Lithuanian National Heritage, the Preservation of Digital Content and Access to It* which was passed on May 20, 2009 by the Government of the Republic of Lithuania, and which ratified the strategic plan for 2009-2013. The document claims that one of the strategic aims of the Government is *to promote the digitisation of cultural objects preserved in various memory*

institutions, and to ensure that Lithuanian cultural heritage is preserved, integrated into a virtual space of cultural heritage and broadcast to the world [5]. Furthermore, there is a need to develop an integral information system for the digitisation of cultural heritage that would enable the preservation of cultural objects, allow access to them, and integrate them into the common digital space of European cultural heritage. The aim, therefore, is to create the right set of legal, organisational and other important conditions for developing the integrated infrastructure of Lithuanian cultural heritage digitisation. An integrated system for searching, preserving and accessing digitised cultural heritage is to be created as well as efforts put to improve the competence of the specialists working with digitisation in various memory institutions. Along with that, it is important to standardise the processes of cultural heritage digitisation, preservation and access, to create and disseminate the digitised content of Lithuanian cultural heritage worldwide and, last but not least, to encourage initiatives that promote digitised cultural heritage.

Together with the resolution, a plan for 2009-2013 was ratified; there it is noted that LAM together with the Martynas Mažvydas National Library of Lithuania and the Lithuanian Archives Department under the Government of the Republic of Lithuania are directly responsible for digitisation; i.e. they are designated to function as digitisation centres, to coordinate the digitisation of Lithuanian cultural heritage, to encourage communication between various memory institutions and also to be responsible for spreading news and information on this subject locally and internationally. The funding for implementation of this project will be obtained from the Republic of Lithuania and EU Structural Funds.

Regarding development of an integrated system for searching, preserving and accessing the digitised cultural heritage, the plan included provisions that from 2009 to 2011 the Lithuanian Integral Museum Information System (hereafter LIMIS) should be developed and installed in Lithuanian museums.

Following the resolution, on June 30, 2009 Lithuanian Art Museum founded a new department – the Lithuanian Museums' Centre for Information, Digitisation and LIMIS (hereafter LM IDC LIMIS), whose mission is to not only organise and coordinate the digitisation of museums' assets and to present cultural heritage on the international portals but also to develop the Lithuanian Integral Museum Information System administered according to homogeneous standards and encompassing a number of collection databases of Lithuanian museums.

In 2009, executing the order *On the Assignation to Pursue the Project 'Implementation of Lithuanian Integral Museum Information System LIMIS in Lithuanian Museums' Given to Lithuanian Art Museum* issued by the Minister of Culture of the Republic of Lithuania, LM IDC LIMIS conceived a project on the installation of LIMIS in the country's museums and proposed it to the Central Project Management Agency. The preliminary dates for the project were March 2010 – August 2012. During this period, LIMIS was to be developed and installed in 19 Lithuanian museums (4 national and 15 state museums). For the second stage of the project, LIMIS will be introduced in other Lithuanian museums (regional, departmental, etc.).

The project was agreed upon and launched on March 18, 2010, after the contract between LAM, the Information Society Development Committee and the Central Project Manage-

ment Agency concerning project funding and administration was signed. For now, LIMIS regulations based on valid laws of the Republic of Lithuania are already issued, and the LIMIS specification confirmed. Public procurements are still being administered; classifications, thesauruses, keyword dictionary and the Name Authority File are being compiled.

In February 2010, LAM together with the M. K. Čiurlionis National Art Museum (Kaunas), Lithuanian Sea Museum (Klaipėda) and Šiauliai Aušros Museum (Šiauliai) signed an agreement which indicated that three regional digitisation centres would be founded in those museums. In March 2010, the centres were established; their function is defined in the set of regulations issued by LAM and the above-mentioned museums. Each centre has one employee from LM IDC LIMIS.

LIMIS is being created not only for computer-assisted stocktaking of museum collections and exhibits, but also their storage, management and control, which follows unanimous standards in accordance with the list of standards recommended by the Minister of Culture along with the well-established order on the preservation and stocktaking of museum collections. Another underlying objective is to integrate the databases of Lithuanian museums into a joint information system and to ensure the development and maintenance of the LIMIS electronic cata-

The Last Supper.
Hipolitas Burneika.
1ˢᵗ half of 20ᵗʰ century.
Polychrome wood;
h 20 cm, l 40 cm, w 9.5 cm;
Property of
Lithuanian Art Museum.
Inv. nº LM-1088
Photo by Antanas Lukšėnas

logue. It will also provide the means for digitising museum exhibits and developing full-text databases, along with a search tool as well as information on exhibits. The system will enable museums to not only send data about their exhibits to the integral museum information system but also to make their own

Compilation of all the necessary classifications, thesauruses, keyword dictionary and the name authority file has already started. The work is carried out by five specialists from the Methodical department of LM IDC LIMIS who work under the project *The installation of the Lithuanian Integral Museum Information System*

electronic catalogues, provide free access via Internet and to do virtual exhibitions from the data that is aggregated in museums' electronic catalogues. In addition, they will also be able to take part in other digitisation projects and to independently provide their project partners with data on their digitised exhibits.

(LIMIS) in Lithuanian museums. They cooperate with various Lithuanian museums and working parties. Evaluating a wealth of experience that memory institutions from Lithuania and other countries have, classifications and thesauruses are made considering the particularity of the types of cultural objects that are

ATHENA National Workshop at Lithuanian Museums' Centre for Information, Digitisation and LIMIS. 22 June, 2010. Photo by Irena Endrijaitienė.

accumulated in the country's museums. The already compiled classifications and thesauruses are then sent to the museums for the special working groups comprising of the specialists of art, culture history, natural and technical sciences, and restoration. They analyze the data and make suggestions to complement or correct it. After the analysis of comments and suggestions, LM IDC LIMIS specialists make adjustments and then send it once again for museums' specialists to review. Only after the final check they are presented to experts and scientists to evaluate. The classifications and thesauruses will be both in Lithuanian and English, except for particular cases concerning specific collections where additional terms in Latin and Russian will be included.

At the present moment there is no system capable of integrating all the country's museums and enabling the automatic stocktaking and digitisation of the museums' exhibits in spite of the need for that capability. In that regard, in 2010 LM IDC LIMIS presented the virtual exhibition information system www.muziejai.lt/emuziejai, which offers every museum a possibility to already start learning how to digitise exhibits, and to supply Internet users with information about them. As a result of collaboration with ATHENA, the system is designed to make it possible to harvest information on museums' assets to Europeana through ATHENA mechanisms. By the beginning of 2010 more than 500 exhibits were already digitised and the data provided to the administrators of ATHENA project.

In the coming years it will be possible to harvest data on museum assets directly in Europeana through www.epaveldas.lt. From 2010 onwards, the Martynas Mažvydas National Library of Lithuania is running the project *Creation of Virtual Electronic System of Cultural Heritage* with the support of EU Structural Funds. The project has several partners from among the most important memory institutions in Lithuania, including three museums: LAM, the Lithuanian Theatre, the Music and Cinema Museum, and the Šiauliai Aušros Museum. Participating in the project opens up a possibility to contribute to the creation and development of the integral system that will provide tools for search, preservation and access of cultural heritage.

Notes:

1. *A Concept Concerning the Digitisation of Lithuanian National Heritage* confirmed by the resolution *On the Affirmation of a Concept Concerning the Digitisation of Lithuanian National Heritage* passed by the Government of the Republic of Lithuania on August 25, 2005 in *Valstybes žinios*, 30-08-2005, No. 105-3877.

2. Ibidem.

3. Ibidem.

4. *Museum Modernisation program in 2007-2015* confirmed by the resolution *On the Affirmation of the Museum Modernisation program in 2007-2015* passed by the Government of the Republic of Lithuania on March 14, 2007 in *Valstybes žinios*, 2007-03-24, No. 34-1238.

5. *The Strategy Concerning the Digitisation of Lithuanian National Heritage, the Preservation of Digital Content and Access to It* confirmed by the resolution *On the Affirmation of the Strategy Concerning the Digitisation of Lithuanian National Heritage, the Preservation of Digital Content and Access to It* passed by the Government of the Republic of Lithuania on May 20, 2009 in