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Europeana Travel

Report on digital preservation practice and plans amongst LIBER members with recommendations for practical action

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Author(s) Natalia Bergau



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Executive Summary

Europeana *Travel*¹ is a two-year project funded by the European Commission within the area of Digital Libraries of the eContent plus² Programme. Its overall objective is to digitise content on the theme of travel and tourism to be made accessible via Europeana³, the European digital library, museum and archive.

As part of Work package 1 concerned with planning digitisation, a survey was designed to collect information about digital preservation practice and plans amongst all LIBER member libraries to inform future activity of LIBER's Working Group on Preservation and Digital Curation. The survey focused on the digital preservation of digitised material.

This report presents the results of the survey. The findings are based on responses to an online survey conducted by the Europeana *Travel* project in April/ May 2010. From the 51 responses received in total by 31th May 2010, 39 build the basis for the analysis below. The results are to be treated as indicative rather than representative for LIBER and the European library landscape.

The major findings are as follows:

- Some LIBER members have already been engaged in digitisation activities. The number of institutions with digitisation activities and the volume of digitised material are expected to grow further in the future.
- There is a mismatch between the perceived high value of digitised material and the frequent lack of a written policy/ procedure addressing the digital preservation of these collections. A number of the institutions without an according written policy stated they were working on developing and establishing one.
- Storage and development of tools are areas where considerable investments are made by the majority of institutions surveyed. Those are also the fields where many of the institutions face difficulties.
- Investments in staff assigned to digital preservation task are still inadequate at several institutions.
- Some digital preservation practices and basic integrity measurements are more widespread than others. More than half of the institutions which responded already have an archive dedicated to digitised collections in place, use preservation metadata standards and format restrictions to support preservation, have processes of bit-stream preservation implemented and provide staff training in the area of digital preservation. One can identify a clear tendency that emulation strategy is less commonly used than migration and other migration supporting practices.
- Difficulties in establishing digital archives with a functioning preservation system, the frequent lack of institutional strategies concerning digitisation and digital preservation and funding problems seem to be amongst the most serious problems faced by LIBER members.

Recommended next steps include:

- Help to transfer the existing practices from "advanced players" to the less experienced institutions, i.e. help to share and promote available solutions for workflow models, preservation systems and tools, as many of the respondents stated that these are the areas where more support is needed.
- Support the establishment and implementation of digital preservation infrastructures and policies.

¹ http://www.europeanatravel.eu/

² http://ec.europa.eu/information_society/activities/econtentplus/index_en.htm

^{3 &}lt;a href="http://www.europeana.eu/portal/">http://www.europeana.eu/portal/

Introduction

For several years, considerable investments have been made in digitisation activities across Europe and far beyond. Numerous libraries are currently digitising their collections and aim at making them accessible online for a wider public. Europeana *Travel*, a project funded by the European Commission within the area of Digital Libraries of the eContent plus Programme, is one such initiative. The project's main goal is to digitise a substantial number of resources from major university libraries and national libraries within Europe to make them available via Europeana, the European digital library, museum and archive. The material to be digitised will include books, maps, manuscripts, photos, film negatives, postcards and other types of objects related to the theme of travel and tourism, a priority content theme identified by Europeana.

Making the digitised material available and visible online is only one of the challenges faced by such undertakings. Another lies in assuring long-term access to them. Digitised materials – like other digital data – are also fragile items and need special measures and arrangements in order to be accessible despite technological change. While the preservation of paper documents is well understood and is supported by a well-established infrastructure and a profession of librarians and other experts, the preservation of digital objects in general and digitised material in particular is a relatively new task for libraries and poses great challenges in terms of the expertise and resources required.

In recent years, considerable efforts have been undertaken to set the stage for digital preservation in general: Numerous projects, workshops and conferences are underway addressing various aspects of long-term management of digital data. Some of these joint activities have proven to be very successful and brought first 'fruits': different tools, models and support services. However, it is not clear how far libraries actually are along the path of developing and implementing digital preservation in general and which measures are they currently taking to assure long-term access to their digitised collections.

In April/ May 2010, the Europeana *Travel* project conducted a survey to investigate the digital preservation activities and plans amongst LIBER members. The survey mainly focussed on the digital preservation of digitised material as it builds a direct link to the Europeana *Travel* goals. The aim was twofold: a) to assess the current digitisation activities and the implementation of digital preservation policies and practice amongst LIBER network members and b) to gather information about their future plans. It aimed at describing the common practice amongst LIBER members in digital preservation of digitised material, recognise some of the main challenges and define the areas where joint action would be needed.

This document is divided into four chapters. Following the Introduction, the first chapter describes the methods applied for conducting the survey and discuss the received survey response. The first results of the survey are presented in the second chapter, with the draft report maintaining the structure of the online questionnaire. General conclusions and recommendations close this report.

Acknowledgements

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In special, I would like to thank the following people for their support: Barbara Bayer-Schur, Daniel Beucke, David Fuegi, Els van Eijck van Heslinga, Jeffrey van der Hoeven, Marian Lefferts, Martin Liebetruth, Jens Ludwig, Carmen Morlon, Wouter Schallier, Birgit Schmidt, Stefan Strathmann, Toomas Shvak, Sven Vlaeminck.

On behalf of the Europeana *Travel* project, Natalia Bergau

1 Methods

1.1 General Information

The Europeana *Travel* survey was conducted in April and May 2010 by means of an online survey. It was decided to use this instrument mainly because, first, it allows quick dissemination and, second, it offers a very easy and direct way to respond to the potential participants.

The survey was developed based on previous digital preservation reports and questionnaires including amongst many others: PLANETS project report "Are you Ready? Assessing Whether Organisations are Prepared for Digital Preservation." (2009)⁴; the PARSE.Insight project report "Insight into issues of Permanent Access to the Records of Science in Europe." (2009)⁵, the DPC report "Mind the Gap. Assessing Digital Preservation Policies and Practices." (2005)⁶, the the NEDCC Survey and Colloquium "Explore Digital Preservation Policies and Practices (2005)⁷ and the reUSE report "reUSE Survey on the Long-term Preservation of Digital Documents in European Libraries." (2005)⁸.

The online questionnaire was developed with the help of internal experts on long-term preservation. The draft questionnaire was first presented to the Europeana *Travel* project management and LIBER directorate for comments and revised by an external expert on long-term preservation. The final draft was then pre-tested by two chosen LIBER libraries. The input from the pre-test led to further refinements.

The survey's aim was to collect information about work and plans concerning digital preservation amongst a defined group of institutions, namely the LIBER members. Therefore it seemed reasonable to use the official communication channel between LIBER association and its members to disseminate the invitation email for participation in the survey. We hoped that in this way we could profit from the institutional support and receive more attention. Therefore we decided to disseminate the survey via the LIBER mailing list. One of the challenges of this solution was the fact that we could not control which person in the institution exactly would receive and respond to the invitation. In order to target the right people within the institution, we explicitly stated in the invitation email that the survey is addressed to the staff involved in areas of digitisation and digital preservation.

The initial invitation email (see Appendix A) was sent to all potential participants exclusively via the LIBER mailing list on 21st April 2010. Response deadline was set on 31th May 2010. Following an initially low response rate, a general reminder to participate in the survey was sent to all LIBER members via the same distribution channel on May 6.

To collect the answers we used the web application Survey Monkey⁹. There were many good reasons choosing this survey tool¹⁰ as it offers several useful features for designing and performing a quick analysis of the results.

The survey comprised 27 questions and aimed to collect the information in five following areas:

⁴ http://www.planets-project.eu/docs/papers/Sharpe_AreYouReady_iPres2009.pdf

⁵ http://www.parse-insight.eu/downloads/PARSE-Insight D3-1 SurveyAndForumPlatforms final.pdf

^{6 &}lt;a href="http://www.dpconline.org/vendor-reports/download-document/340-mind-the-gap-assessing-digital-preservation-needs-in-the-uk.html">http://www.dpconline.org/vendor-reports/download-document/340-mind-the-gap-assessing-digital-preservation-needs-in-the-uk.html

⁷ http://www.nedcc.org/resources/digital/downloads/survevexplorearticletc.pdf

⁸ http://www.uibk.ac.at/reuse/docs/d 6.7study european digital repositories.pdf

⁹ To learn more visit http://www.surveymonkey.com

¹⁰ Please see D3.1 Survey and Forum Platform for good reasons to use this web application http://www.parse-insight.eu/downloads/PARSE-Insight D3-1 SurveyAndForumPlatforms final.pdf

- A: General information about your organisation
- B: Digitisation activities
- C: Policies, responsibilities and preservation
- D: Preservation arrangements
- E: Collaboration and support needed

The survey was designed to take approximately 15 minutes to complete. It combined closed and open questions, whereas the open questions with an explorative character were placed at the end of the questionnaire.

Due to the fact that the focus of the survey had been set on the digital preservation of digitised material, it was important to collect responses only from those institutions which were involved in digitisation activities. To filter out all the libraries which do not perform any digitisation activities yet, it was decided to implement a skip logic in Question 6 ("Does your institution digitise materials?"). All the respondents who answered this question with "No, but we plan to do so in the future" or simply with "No" were then automatically forwarded to the last question and asked for additional comments.

The online questionnaire therefore had the following structure:

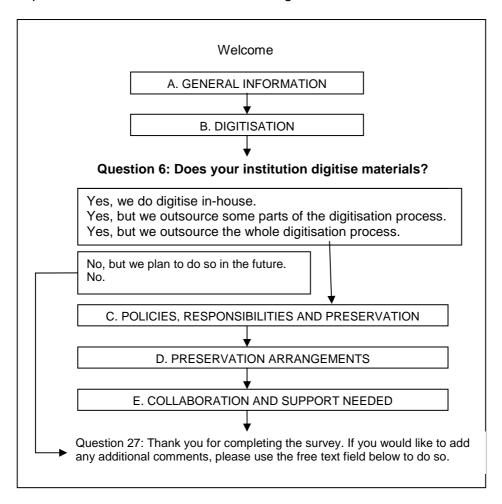


Figure 1: Structure of the online questionnaire (skip-logic)

1.2 Survey population and survey response

As defined in the survey purpose, the survey population was limited to LIBER members. Although the exact number of LIBER members is not easy to state since it changes nearly every month, there are approximately 400 current members. The LIBER members are mainly national, university, and other libraries from EU countries. As membership is not restricted to the European Union, there are also several member libraries from other, non-EU countries¹¹.

We encouraged all LIBER members (irrespective of their involvement/ non-involvement in digitisation activities) to take part in the survey. By 31th May 2010, 51 responses were received in total. If only this total number was taken into account, the coverage of the survey could be roughly estimated to be slightly more than 10%. However, not all of the responses received were evaluable and/ or relevant for our analysis. After applying a filter for institutions without digitisation activities in place and excluding the invalid responses, the number of responses reduced to 39 as shown in Figure 2.

There is another issue which put the number of responses into a new perspective and makes assessing the response rate of the survey somewhat challenging. Only some of the approximately 400 LIBER members are digitising material and therefore build the target population of the survey. The total number of potential survey respondents is smaller than the total number of LIBER members. Therefore only a part of all LIBER members with digitisation activities form a benchmark for assessing the response rate of this survey. Unfortunately, the exact total number of LIBER members with digitisation activities is unknown at the moment and needs further research.

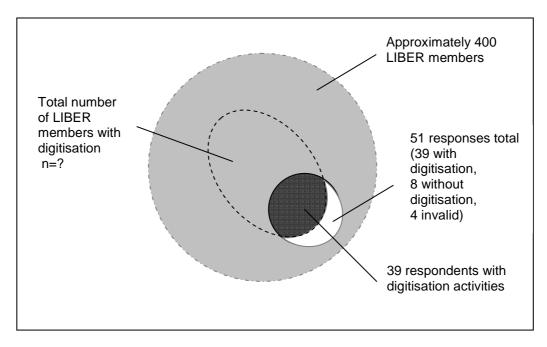


Figure 2: Survey population and survey response

The survey included closed and open questions and only the question about the institution type was obligatory to answer, whereas responses to other questions were optional. Hence, the respondents were in a position to freely choose which questions they would like to answer. This reduced the possibility of them dropping out of the survey completely which might have been the case if they had been obliged to answer all questions. As a consequence, not all of the 39 respondents chose to answer all questions. Several of the

¹¹ For a list of current LIBER members visit: http://www.libereurope.eu/userlist

respondents only answered the first few questions, others left the open questions at the end of the survey without an answer which resulted in a very small share of responses with a complete set of answers. The total response count per question therefore varies for each question. The resulting percentages are put into relation to the total response count received for each question. Although being aware of the fact that using all - even the incomplete - responses for the final evaluation might lead to unbalanced results, it has been decided to include all 39 respondents in the analysis.

The 39 responses received from LIBER members with digitisation activities form the basis for the survey results analysis below. Due to the small number of responses given, the results presented are rather indicative for the state-of the art and plans amongst LIBER members and not necessarily representative for the whole target population.

2 Results

2.1 General information

We had received 39 answers from LIBER members with digitisation activities in place.

2.1.1 Respondents by country

As one could expect due to the fact that the LIBER network consists mainly of libraries from European countries, the majority of responses (82%)¹² came from institutions located in Europe. Additional share of nearly one-fifth (18%) came from non-EU countries. The survey received relatively numerous answers from Central and Eastern European countries and relatively few from countries with more established tradition and position in long-term preservation like Denmark, Germany, Netherlands, United Kingdom, and others.

European Union countries				
Country	Response Count			
Austria	2	Ic		
Cyprus	1	М		
Czech Republic	6			
Denmark	1	S		
Estonia	2			
Finland	1	Z S R		
France	2			
Germany	1			
Greece	1			
Hungary	2			
Latvia	1			
Netherlands	1			
Poland	2			
Romania	1			
Slovenia	1			
Spain	2			
Sweden	1			
United Kingdom	4			
TOTAL	32			

Other Countries				
Country	Response Count			
Iceland	1			
Montenegro	2			
Norway	1			
Switzerland	1			
Russian	2			
Federation				
TOTAL 7				

Other countries

Figure 3: Survey respondents by country

2.1.2 Respondents by size of their institution

Concerning the size of the institutions which participated in the survey, nearly three-quarters (74%) were (in terms of the number of full-time equivalent staff in the institutions) either large or very large (more than 201 FTEs). The survey also received 9 responses (23%) from institutions of medium size (31-100 FTEs).

All percentages in the report are brought down to a round figure.

What is the size of your institution?

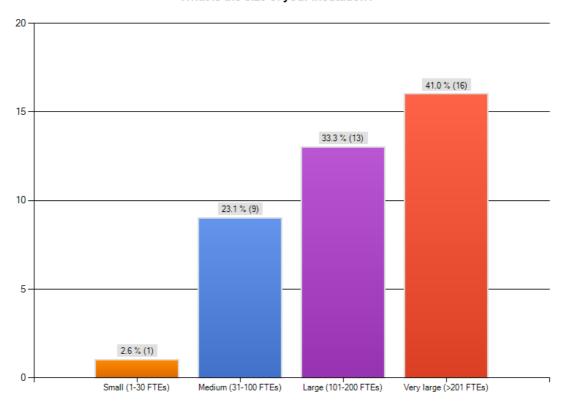


Figure 4: Survey respondents by size of their institution

2.1.3 Respondents by institution type

The survey responses mainly came from three kinds of institutions: national libraries, university libraries and research libraries. This composition seems to be in accordance with the types of libraries represented in the LIBER network. Taking into account that some institutions might have dual functions, multiple answers were allowed. Therefore, categorising the responses is not entirely straightforward, as one and the same institution can act e.g. as a national and as a university library. In such a case, the institution was counted for both categories.

What is your role in the institution? (multiple answers possible)

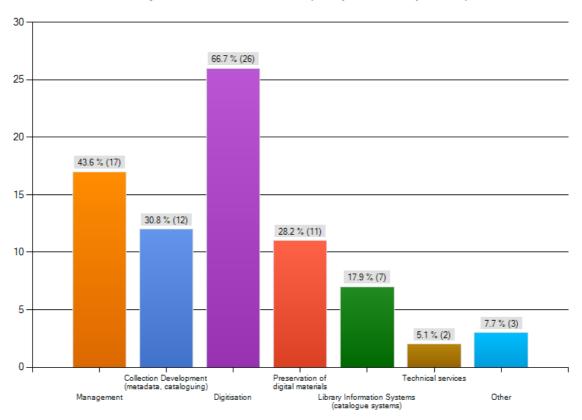


Figure 5: Survey respondents by institution type

2.1.4 Respondents role in the institution

It was assessed which role the persons responding to the survey were playing within their institution. Due to the fact that some of the respondents are working in more than one area or were jointly answering the questions, we allowed multiple answers. The majority of the responses came from respondents involved in digitisation (26 respondents, 67%) or management (17 respondents, 44%) activities. For some respondents collection development (12 respondents, 31%), preservation of digital material (11 respondents, 28%) or library information systems (7 respondents, 18%) were the area of their expertise. Five respondents worked in the area of technical services or other fields.

2.2 Digitisation

Due to the fact that only institutions involved in digitisation could potentially take care of the digital preservation of digitised material, we decided to collect responses only from those institutions with digitisation activities in place. Amongst 51 survey responses received in total there were 39 institutions which fulfilled this criterion. Their responses provided the data for the analysis below (see Figure 2). Additionally, there were eight LIBER member institutions that responded to our invitation and stated to have no digitisation activities in place so far. Amongst this "no digitisation" group there were two institutions from EU and six from non-EU countries. Three-quarters of them (6 respondents) were institutions of medium size, acting mainly as a university library (5 respondents) and/ or as national library (3 respondents). Nearly all of them (7 of 8 respondents) stated that while not being involved in digitisation activities at the moment, they plan to digitise materials in the future.

2.2.1 In-house vs. outsourced digitisation

We further asked the institutions with digitisation activities in place to differentiate whether this task is carried out in-house or outsourced by their institution. According to the collected data, the great majority of digitisation work, 59% (23 responses) is undertaken in-house by the institutions' own staff. Additional 31% of institutions (12 responses) state that they outsource some parts of the digitisation process and the remaining 10% (4 responses) outsource the whole digitisation process. Those proportions and percentages for in-house/ outsourced digitisation stay nearly the same despite the type of the institution surveyed.

However, this demarcation line does not always seem to be as clear as this, as some of the respondents stated that depending on the type of material and type of the project in question they have different solutions in place and sometimes use both digitisation options (in-house and outsourced).

Does your institution digitise materials? 25 59.0 % (23) 20 15 30.8 % (12) 10 5 10.3 % (4) n Yes, we do Yes, but we outsource Yes, but we outsource No, but we plan to No me parts of the digitisation process

Figure 6: The presence and the character of digitisation activities

2.2.2 Type of digitised material

The survey further aimed to assess the kind and amount of digitised material potentially requiring preservation.

In order to receive a better picture of the material represented in digitised collections the respondents were asked to specify what kind of material had already been digitised at their institution. To give an easy to answer matrix, we classified the possible replies in five main categories: text, photo(graphical) material, sound, video and other material. The respondents were asked to assess in each case the type and the number of digital content objects represented in their digitised collections (e.g. 10 journals (400,000 pages), 50 maps, 2000 postcards etc.). The 34 answers received varied greatly concerning the exactness of

specifications, depth of information given and units describing the material, which made the analysis challenging.

In general terms, nearly all institutions which responded to the survey (97%) have digitised some kind of text material such as journals, monographs, manuscripts and dissertations. Additionally, more than two-thirds of the respondents (71%) have digitised images, photographs, maps and/ or other (photo)graphical items. Ten respondents (29%) declared to have digitised audio files and 9 to have digitised video files. Other material digitised included: "more than 20.000 sheets music", "300.000 manuscript pages", "three virtual exhibitions" and "3.000.00 index cards".

2.2.3 The total volume of stored digitised material

Respondents were presented with categories of data volumes (from one megabyte (MB) to over one petabyte (PB)) and asked to indicate the total volume of digitised material they store now and the volume expected to be stored in two years' time.

We received 29 responses in total to this question. However, three of the respondents haven't answered both parts of this question which was necessary to assess the expected development of data volume at each institution. Therefore, only 26 responses with complete information were analysed. The aggregated data is shown in Figure 7.

In more detailed analysis of the data collected it could be seen that the majority of institutions (16 of 26 respondents) expect that compared to the present the data volume held in two years' time will rise. More than a half of them (9 respondents) currently store between 1MB and 1TB of digitised material and expect it to increase in two years' time to a total volume between 25-100 TB. Eight institutions selected the same volume statement for both parts of the question. This might indicate that the current and expected total amount of data will remain more or less the same during this period. It is also possible that it might change but will still stay within the same volume category defined in the survey questionnaire. Finally, two remaining respondents were not able to define the amount of digitised data neither stored currently nor expected in two years' term.

This expected overall increase in the amount of digitised material over time is further supported by statements made by the respondents concerning the plans of their institutions for the nearest future (see point 2.4.3). A number of institutions declared to continue with digitisation projects and to start with mass digitisation.

30 7.7 % (2) 7.7 % (2) 25 7.7 % (2) 11.5 % (3) 20 15.4 % (4) 7.7 % (2) I don't know ■ >1PB ■ 500TB-1PB 100TB-500TB 15 25TB-100TB 38.5 % (10) 1 TB-25TB 1MB-1TB 50.0 % (13) 10 26.9 % (7) 5 19.2 % (5) 7.7 % (2) 0

Please estimate the total volume of stored digitised materials:

Figure 7. Volume of stored digitised material

in two years' time:

2.3 Policies, responsibilities and preservation

by now:

2.3.1 Long-term preservation storage for digitised material

To assess whether long-term storage facilities for digitised material are present amongst LIBER members institutions the respondents were asked, if their institution currently stored digitised material for long-term preservation (Question 9). Out of 31 respondents who answered this question more than four-fifths (26 respondents, 84%) confirmed that their institution currently stores digitised material for long-term preservation. The remaining 16% (5 respondents) said they did not do long-term preservation storage for digitised material at present but that they have plans to do so.

Amongst the group who already perform long-term preservation the great majority (21 of 26 respondents) store digitised material in-house. Three other respondents said they store the material partially in-house and partially outsourced and to keep a second or even third copy at other institutions or organisations. Two others said that they outsource this task completely (either to university computer centres or to a public national institution).

2.3.2 Responsibility for long-term preservation

The survey also sought to establish the kind of responsibility for long-term preservation assumed by each institution. As expected, responsibilities varied. While national libraries fulfil their task as national legal deposit library and often act as a deposit library responsible for special/ disciplinary collections, university and research libraries tend to voluntarily take care of this task as a part of their mission and often cooperate with other institutions/ companies to do it.

2.3.3 Percentage of digitised material meant to be kept for long-term

In order to assess whether all digitised material or only some part of it is meant to be preserved for a long-term the respondents were asked to estimate what percentage they plan to preserve for long-term. From 29 respondents who answered this question, the great majority (21 respondents) stated that they perceive all the material digitised by their institution of value and plan to assure long-term access to it. Four respondents stated that they plan to preserve between 90-95% of digitised material for long-term and three other respondents answered that the percentage will be less then 90%.

Some of the respondents gave additional comments on their estimates. One of the respondents who declared that their institution planned to preserve all the material digitised, annotated that "Storing objects is cheaper than digitising on demand - again." Another respondent commented that the 90% given for their institution is due to the fact that "very specific material will not be kept" (for long-term). He/ she further stated that "it is sometimes easier to collect everything (but to observe that there are no duplicates) than to have sophisticated administrative procedures for deselecting material from preservation". Another respondent who estimated that their institution will preserve only about 10% of digitised material added that long term preservation "is at least bit stream preservation with synchronisation of replica." He/ she stated further: "We expect to hold all digitised material but at different preservation level".

2.3.4 Perceived urgency of the preservation task

Asked about the urgency of the preservation task for their institution, more than 50% institutions (16 respondents from 30 respondents in total) stated that compared to other activities the preservation task is either "urgent" or "very urgent" to them. Further 14 institutions perceived this as a "somewhat urgent" matter.

One respondent from a national and university library stated that the issue is somewhat urgent and that they already face difficulties in managing objects in their file system. Another respondent noted that the urgency depends on the type and character of the material in question and stated that while the preservation is "very urgent [task] for born digital material and for material where the digital copy substitutes the original, it is "less urgent for digitised material in general" for his/ her institution.

2.3.5 Reasons for digital preservation of digitised material

In order to assess why the institutions think it is important to assure that digitised material is preserved for long-term, they were asked to rate the importance of four reasons for digital preservation of digitised material.

For example for some of them it could be important to take care of the digital preservation of digitised material due to the fact that a second digitisation would be impossible as the material is too damageable or will be lost by then (reason 1). Another good reason for assuring the long-term accessibility to digitised material could be that a second digitisation would be simply too expensive (reason 2) or that the material does not belong to the collection of the institution in question and therefore a repeated digitisation would not be possible (reason 3). Another reason for the preservation of digitised material could be that a long-term preservation infrastructure for other material is already in place and therefore could be also used to preserve digitised collections (reason 4).

The first two reasons seem to be most important for the majority of institutions. Nearly half of the respondents rate them as "very important". Interestingly, while for national libraries the first reason seems to be the crucial one, research and university libraries rate the cost-factor higher and as very important for their considerations. Five out of eight research libraries perceived the first reason only as "somewhat important".

Compared to this, reason number 3 does not seem to be that relevant for digital preservation of digitised material. This reason has been rated by only 8% as "very important" and by 21% as "important" while 38% of the respondents (among them remarkably many university and

research libraries) perceived it as only "somewhat important" and further 33% considered it to be not important at all.

The impact of the existence of a long-term preservation infrastructure (reason 4) is according to the results somewhat unclear. While 28% of respondents confirm that it plays an important role, another 28% perceived this reason as not important at all. While for some part of the institutions (16%) it was a very important reason for digital preservation of digitised materials, another large group (24%) did not know what to answer. While comparing the importance of this reason amongst different types of institutions one could observe that there is a slight tendency for the national libraries to perceive this issue rather as "very important" and for research libraries as "important", while for university libraries it seemed less relevant.

One respondent added a general comment with regards to the given infrastructure: "Long-term preservation is more expensive that just storage. We will never lose all digital material in normal storage and can re-digitise lost pages in damaged files. Long-term preservation infrastructure is reserved [to] material with no other copies available in the library."

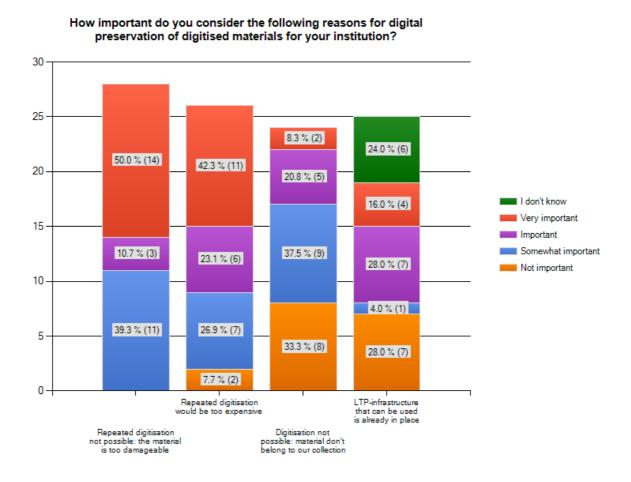


Figure 8. The reasons for digital preservation of digitised material ¹³

2.3.6 Existence of a written policy/ procedure concerning digitised collections

In order to assess whether the preservation of digitised material is formally regulated at institutional level, the respondents were asked to state whether their institution has a written

¹³ Due to the space limitation the response categories given in Figure 8 are slightly modified. For the exact wording of the response categories see Appendix A (Question 13).

policy or procedure that addresses the preservation of digitised collections. From 30 respondents who answered to this question in total only 11 (37%) stated that their institution has a written document of that kind. Four of them further provided a URL where an online version of this document is available. More than half of the institutions which responded to this question (57%, 17 respondents) do not have such a written policy/ procedure yet. However, the majority of them (14 institutions) state that they plan to develop one soon. From the remaining five respondents three stated that his/ her institution does not have a written policy of that kind and does not have any plans yet to develop one and two other could not tell whether there is such a document available.

2.3.7 Investments made for digital preservation of digitised material

How would you assess your investments made for digital preservation

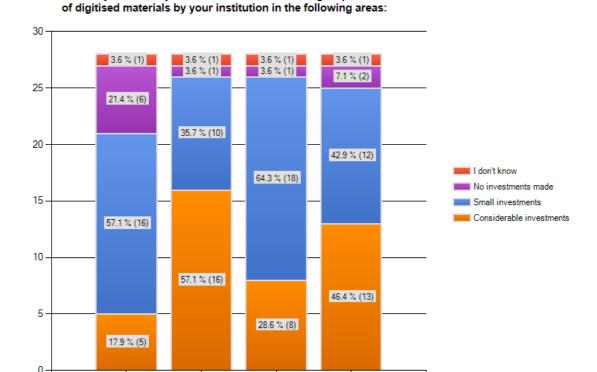
Storage

Staff

Respondents were asked to assess the extent of investments made in staff, storage, development of workflows and development of tools concerning digital preservation of digitised material. 28 answers were received in total. More than half of the respondents stated that their institution was investing considerable amounts of resources in two areas: in storage (57%, 16 respondents) and in development of tools (46%, 13 respondents).

Compared to this, only 29% (8 respondents) saw such investments made by their institution in development of workflows and even less (18%, 5 respondents) in staff. In those two areas rather small investments were more commonly made: 64% (18 respondents) stated that at least small amounts of resources were devoted to the development of workflows and 57% (16 respondents) said the same for personnel costs.

According to the results collected it seems that investing in staff is generally falling a little behind those developments as 21% (6) respondents stated that their institutions has made no investments in this area. Compared with answers from other types of institutions a relatively high number of university libraries (5 from 13 institutions) stated that no staff investments had been made so far.



Development of workflows

Development of tools

2.3.8 Staff involved in digital preservation

Questions concerning the number and kind of staff working in the area of digital preservation would require detailed information about the institution. As this would be beyond the scope and possibilities of our short survey we purposely decided to only research certain aspects of staffing policies. Therefore we decided to let the respondents assess whether five statements concerning staffing applied/ did not apply to their institution. The statements were designed amongst three dimensions:

- Whether there is staff exclusively devoted to digital preservation tasks or if staff employed at the institution is also performing other tasks for other sections/ departments (Statement number 1 and 3).
- Whether staff is paid through external funding or through regular budget (Statement number 2 and 4).
- Whether there are plans for hiring permanent staff for digital preservation tasks (Statement number 5).

The results indicate that, in a very general perspective, from all institutions that assessed the statement number 1 the slight majority (13 from 25 respondents, 52%) does not have staff assigned *exclusively* to digital preservation task. In particular nearly all university libraries and more than a half of all research libraries that answered this question stated that they currently do not have this kind of staff hired, while on the contrary, a number of national libraries confirmed having manpower that *solely* takes charge of digital preservation tasks. Still, more than half of all libraries (18 from 27 respondents, 67%) stated that they have staff for digital preservation (statement number 3). The majority of national, research and university libraries state that they do have staff partially responsible for digital preservation. However, five university libraries (out of 13 university libraries in total) admitted that they still do not have staff neither exclusively, nor partially assigned to preservation tasks.

Considering the question whether staff is paid for by external funding or by regular funding, the answer is less clear and poses some methodological challenges. While taking into consideration only those libraries that answered with "Yes" to the first or third statement, the base for financing this staff divides nearly equally into external and internal funding. It seems however that national and research libraries finance their staff to a somewhat higher portion from internal funding.

Concerning the plans to hire staff assigned to preservation tasks in a long perspective, nearly half of national libraries which responded to this question said that permanent staff was responsible for digital preservation, while the majority of university libraries admitted that no such plans were made so far. One-third of the research libraries were planning to secure manpower for this task for a longer period of time while another one-third of them haven't such plans yet. Further, there was a relatively high number of respondents in general who did not know what to answer or whether such plans were made for their institutions.

Which statements on the staff involved in digital preservation apply best to your institution?

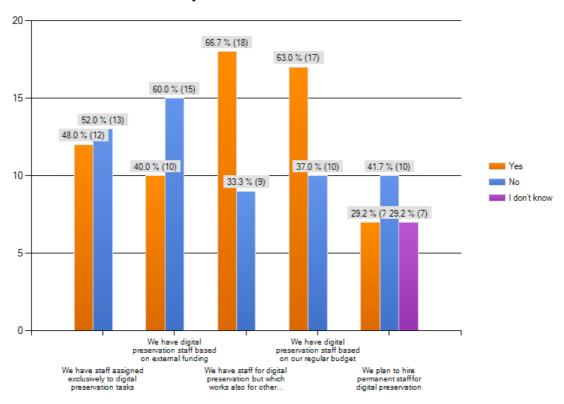


Figure 10: Staff involved in digital preservation

2.3.9 Budget plans for the next five years

Slightly more than half of the institutions which responded to this question (52%, 15 respondents from 29 respondents in total) stated that they plan to spend more on digital preservation issues within the next five years. Especially many national and university libraries were amongst this group of respondents. A further 10% of respondents (all of them from national libraries) declared that they plan to maintain their level of spending in this area. For more than one-third of those who responded to this question (11 respondents) the plan is not fixed yet.

What are the budget plans for the next five years?

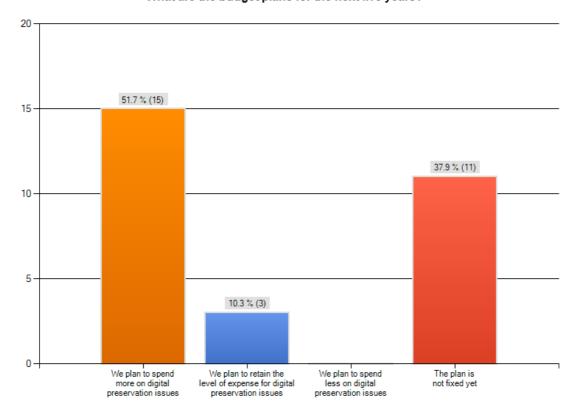


Figure 10: Budget plans for the next five years

2.4 Preservation arrangements

There are several strategies, processes and tools which can be used by the institutions in order to help preserving digitised collections. In order to assess the implementation of those practices amongst LIBER members we asked the respondents to state which of the preservation arrangements are already used (in-house/outsourced) or planned to be used by their institution.

2.4.1 Use of specific strategies and processes to preserve digitised collections

In general more than half of the institutions which responded to this question-matrix already have an archive dedicated to digitised collections, use preservation metadata standards and format restrictions to support preservation and have implemented bit-stream preservation and provided staff training.

On the other hand, migration on access and emulation are examples of practices which have not been widely implemented yet as more than half of the respondents haven't used them so far.

Format validation, persistent identifier assignment, synchronisation/ replication, normalisation and migration are somewhere in between on this continuum and are already used by at least one-third of respondents. However, one can find a slight differences amongst this group. For persistent identifier and migration an additional nearly one-third of respondents state they have plans to implement this strategy soon. In contrast, for strategies such as format validation, synchronisation/ replication and normalisation a large group of respondents state that they still do not have (and do not have plans yet to implement) them.

Interestingly, two small variations arise when comparing the implementation of all these strategies amongst different types of institutions: While synchronisation/ replication and format validation is used in each case by more than one-third of the national and research libraries which responded to this question, nearly a half of university libraries do not make use of them yet.

The following comments were also received concerning the issues mentioned in the question: "We do not have an archive dedicated to digitised collections - we use our repository to preserve both digitised and born digital [material]."; "Preservation metadata standards are not fully developed."; "At the moment, we use preservations image format like tiffs and preservation metadata like METS and PREMIS, but nothing more. We study for the future the implementation of a preservation system. At the moment we are in an analysis phase."

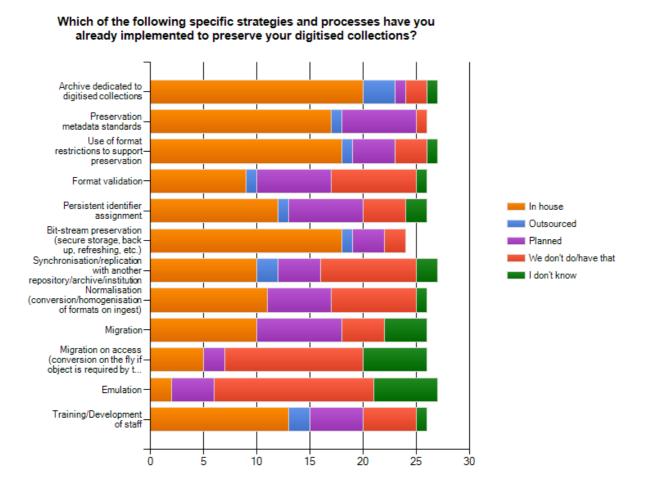


Figure 11: The implementation of preservation strategies

2.4.2 Use of audit-instruments/ self-assessment tools

Since a few years several audit instruments/ self-assessment tools are available to assess the level of trustworthiness of specific repositories/ archives. Amongst the often used, commonly known and established ones there are TRAC (Trusted Repositories Audit & Certification), nestor catalogue of criteria, DRAMBORA and numerous ISO Standards. The respondents were asked to state whether they already used or have plans to use any of them.

From a general perspective, only a small minority of the respondents have already made use of some of the tools available for certification and self-assessment. The most commonly used instruments are those of the ISO group standards. The OAIS standard was named by one respondent.

By applying several filters for these data, we could see that twelve respondents have already been using at least one of the instruments in their repository/ archive and three of them even have plans to use another tool to certify their repository/ archive. Five additional respondents stated that while they have not yet used any of the four tools listed, they plan to use at least one of the instruments mentioned. Still, six respondents stated they have not used any of the four tools listed yet and have no plans so far to use them in the future.

Additionally, the high percentage of respondents (more than 24% for each tool) who answered "I don't know" presents us with difficulties in clearly interpreting the data received. Choosing this option could have several reasons:

- The tool is not familiar to the respondent.
- The respondent does not know whether this tool/ instrument has been applied by his/ her institution.
- It is still unsure whether this or another related tool will be implemented soon (One respondent who ticked "I don't know" for all the audit-instruments options given stated that his/ her institution plans to use at least one of the tools listed but it was at this point not clear which one).

Finally, one respondent commented on this question and stated that the institution plans to use two other instruments available: PREMIS and PLATO.

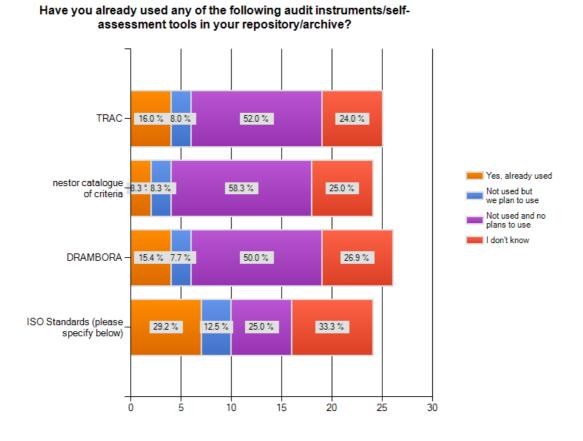


Figure 12: The usage of audit instruments/ self-assessment tools

2.4.3 Plans concerning digital preservation in the next two years (open question)

In order to gain more detailed insights the respondents were asked to describe what plans their institutions have concerning digital preservation of digitised material for the next two years.

12 answers were received from which some common issues can be deduced:

Numerous libraries stated that they will continue with digitisation and plan to start with mass digitisation of some material and collections. ("[We plan to] continue digitisation of journals, newspapers and manuscripts and start mass digitisation of [...] books. Continued digitisation of sound material is also planned in cooperation with other institutions"). Some of them have already taken part in mass digitisation or digital preservation projects in cooperation with other institutions like national libraries of their country.

Another group of respondents said they were working on a digitisation and preservation plan/policy and a written in-house strategy for long-term preservation of digital material at the moment. Some of them have already prepared a draft which they plan to present soon to the head of their institution. Some of them plan to achieve soon a final determination for the digital preservation of digitised materials in terms of standards, staff, storage and data security.

Another relevant issue for the next period of time is the implementation of software for managing digital assets. While some respondents are still looking for a viable preservation system ("At the moment we study the different system to develop a preservation system. But it is really expensive and not many commercials solutions are offering this"), others state to already have more concrete plans to adapt a digital asset management system ("[we plan to] go over to the new FEDORA Repository Release"; "we are about to start mass digitisation of 19th century collection and thus we are planning to have commercial tool for digital preservation starting from 2011"); "[we plan to] implement a digital asset management system, already procured for born digital material, to preserve our digitised materials as well"). One institution plans to outsource its files to a public institution specialised in keeping electronic data safe and another stated that their digital preservation plan is depending on the data storage project managed by the IT department of their institution. Some respondents made only very general remarks concerning the plans for the next two years like: "development of a digital repository" and "[to] keep the backup system running [and to] add more discs" or "continued development of current systems; continued development of custom workflow; incorporating on-demand digitisation activity."

Others provided a far much more detailed insight into their future projects. One respondent wrote: "We have plans in place to preserve our digitised materials using a lifecycle approach. This begins with an approvals process for new projects, digitisation, check in, quality assurance, temporary storage and bit stream preservation and then ultimately ingest to our digital repository for long term preservation." One person listed a number of issues to work on in the future "1. new workflows for new type of materials 2. handling of complex digital objects 3. efficient characterisation and validation for formats not yet covered (sound and moving images) 4. evaluation of the implication of replacing TIFF with JPEG2000 as preservation format." Another specified other points: "web harvesting and preservation (warc files for web archiving); archiving of cultural heritage objects (JPEG 2000 image coding system); archiving scientific / research documents objects in pdf/a."

Therefore libraries' plans for digitisation could be summarised with the statement of one respondent: "To continue to digitise, to adopt appropriate tools and software, to finalise preservation strategy and procedures, to invest on staff and infrastructures and to collaborate with other libraries and institutions in digitisation and preservation initiatives."

2.5 Collaboration and support needed

This part of the survey was designed to collect information about the needs of LIBER members and explore possibilities of collaboration.

2.5.1 The greatest challenges for the institutions with regard to long-term preservation

The respondents were asked to describe the greatest challenges faced by their institutions concerning long-term preservation of digitised material as this would help to define the areas where support and joint action would be most needed. In order to structure the responses they were asked to depict what kind of difficulties their institutions encounter in three defined areas: technical difficulties; organisational/ relating to processes; strategic/ financial.

Regarding *technical difficulties*, one of the challenges lies in the fact that the institutions have to deal with a large amount of digital data and to keep track of millions of documents and files. Therefore, storage requirements and an inadequate storage capacity are often mentioned as a problem in this area.

For some of the respondents the complexity of file formats and the fact that formats are not always easy to be characterised form another technical challenge. For one respondent the transition to jpeg2000 was a difficult issue. Metadata preservation, scalability of workflow and the preservation of the significant properties of the materials which will enable them to be accessed through different devices were mentioned by others.

Generally speaking, however, for the majority of the respondents the establishment of a digital archive with a functioning preservation system is the most serious technical challenge. Setting up a stable and flexible but not too complicated or time-consuming digital repository, migrating from old archival systems to new platforms, continuous upgrading of software applications, the use of the right tools and infrastructures, consolidation of digital archives, assuring interoperability with other systems were amongst other issues mentioned by the respondents.

Concerning organisational matters and processes some of the respondents criticised the lack of an institutional strategy regarding digitisation and preservation. They complained that an official and institutional preservation policy was still missing for their institution. (One of the respondents stated that "making the case for digital preservation" is still difficult). The need for establishing a relevant policy within a collaborative framework at national level has also been expressed by one respondent. Unclear scope of responsibility for the preservation of digitised material was named as a problem by another.

Several voices confirmed that training of staff is an important organisational issue where more support would be needed.

Some of the respondents complained about problems with the definition of processes, harvesting and storing rules, ingest procedures and securing of rights to enable active preservation action.

However, the most urgent problem seems to be related to the lack of accepted workflow models. Setting up a viable digital preservation workflow (also as part of mass digitisation) is perceived as a great challenge by many respondents.

Among *financial and strategic challenges* faced by the institutions, financial problems seemed to be more salient. The prioritisation of digital preservation activity still appears to be a problem for some of the institutions. Some of them are still not funded for digitisation/ preservation as often there are no national funds assigned for this tasks in their country. Some of the libraries therefore are at present financing it from operating costs, others are faced with funding cuts, so that all activities are getting under pressure, including digital preservation. This poses a significant risk. Especially the costs of developing a preservation system go beyond the financial possibilities of some institutions and therefore pose a great challenge.

Assuring the sustainability of digital preservation activities and convincing the decision-makers of engaging permanent staff were mentioned as other important points and difficulties.

2.5.2 Potentially interesting topics concerning digital preservation

Respondents were further asked to specify which topics concerning digital preservation would be most interesting for them at the moment (e.g. as subject of a workshop, project or joint action). The responses and comments included inter alia the following points and statements:

- "Long-term preservation systems and data coming from web-harvesting (how to store them, how to structure them etc.); link between digitisation and preservation (metadata needed etc.)."
- "Data storage in the context of digital preservation: hardware/ software setup. What to mirror and how, what redundancy and on which layer to implement. When and what to check."
- "Preservation metadata standards"
- "Wider range of tools for format characterisation" and "file format watch"
- "Use of JPEG2000 as long-term preservation format."
- "My focus would be on possible benefits for the preservation actions to move from TIFF to JPEG2000. Motivation for that move at the moment is cost driven and not format driven."
- (Experiences with) "implementation of digital preservation strategy"
- "Open source platforms for digital preservation"
- "Technical problems of preservation, organisational work-flow models"
- "How to create efficient workflows, which software and hardware to choose"
- "Storing and make accessible applications, databases"
- "User friendly tools for archiving"
- "Workshop on the role of traditional conservation within digitisation/digital preservation activities"
- "Funding help"
- "Not best practises, but REAL practises."

2.5.3 Possible collaboration

Finally, the respondents were asked what kind of partner institutions (with which specific expertise/ developments in place) they would be looking for to make progress concerning digital preservation and what kind of developments in return they could offer as a partner. The answers to those questions can be considered as rather unspecific.

The respondents either named other institutions of the same type at European level facing the same issues as they do as potential partners or stated that they were seeking to cooperate and have closer partnerships with large libraries and centres of excellence, most commonly national libraries and archives.

Some respondents stated that they were interested in collaborating with institutions with experience in digital preservation issues and current technology (GRID, cloud computing etc.), with expertise knowledge in the area of developing preservation systems (in particular those actively developing open source solutions for digital preservation).

3 Conclusions

3.1 Conclusions

Our findings indicate that there are some institutions amongst LIBER members which have already been digitising materials and plan to continue carrying out further digitisation projects. Additionally, the majority of institutions that responded to our survey and stated not to perform any digitisation activities yet are planning to do so in the future. This means that the total number of libraries undertaking digitisation activities is likely to grow further within the next few years. While the amount and kind of digitised material and collections vary from institution to institution, it is expected by the majority of the institutions surveyed that in the next two years the total volume of stored material at their institution will continue to increase.

Contrary to what one might expect, the majority of respondents stated that they currently already store digitised material *for long-term preservation*. It is unclear, however, which criteria and interpretations of the appropriate long-term storage and processes involved the respondents had in mind when answering this question affirmatively (compare Figure 11).

The findings further confirmed that almost all of the material digitised by the institutions is perceived to be of value and should be preserved for the long-term. However, only one-third of the institutions have embedded and regulated this task within their institutional structure and have a written document addressing digital preservation of digitised collections. Therefore, there seems to be a kind of mismatch between the perceived importance and value of the material and the urgency of the preservation task on the one hand and the frequent lack of a written policy/ procedure at institutional level on the other. Nevertheless, efforts to develop and establish such a policy are apparently undertaken by numerous institutions surveyed. The existence of a policy or a procedure addressing digitised collections is so far of importance as it is perceived as a critical early step in confirming and assuring the institutional commitment to this task¹⁴.

When considering the investments made for digital preservation of digitised material there seems to be some movement towards committing some of the financial resources available for this task. Especially two areas seem to attract considerable investments at a number of institutions at the moment: storage and development of tools. Those are at the same time the fields where many of the respondents experience difficulties and express the need of support. A remarkably high number of research libraries stated that taking the general financial power of their institution into account they feel to undertake considerable investments in all those fields. However, it is somewhat unclear how those investments should be evaluated from a general perspective as the necessary investments and future costs of digital preservation are difficult to predict and calculate.

Some respondents referred to inadequate investments in staff assigned to digital preservation tasks. In particular many university libraries seemed to be confronted with this issue. From the three kinds of institutions, the national libraries seem to be in the somewhat best position concerning the staffing levels. While stating that they have made only small investments in this area so far, several of them at the same time confirm having staff exclusively assigned to digital preservation and having some plans to hire permanent staff for this task. Moreover, one can expect that some financial resources will be devoted to this area since more than half of the institutions plan to increase spending in digital preservation within the next five years.

There are several strategies, processes and tools which have already been used amongst a number of LIBER members. Archives dedicated to digitised collections, use of preservation

¹⁴ See the report of the PLANETS project "Are you Ready? Assessing Whether Organisations are Prepared for Digital Preservation.": http://www.planets-project.eu/docs/papers/Sharpe AreYouReady iPres2009.pdf

metadata standards and format restrictions to support preservation and bit-stream preservation were amongst those most commonly implemented. According to the data collected the use of audit-instruments/ self-assessments tools is by comparison very modest at the moment. While some of the institutions seem to be interested to use them in the future, it is hard to assess what the general tendency is.

It seems that a general awareness of the importance of digital preservation task and good reasons for assuring long-term access to digitised material are given at the majority of the LIBER member institutions which responded to the survey. However, it appears that despite the fact that the relative urgency of preservation is given at most of the institutions, many of them continue to face barriers to take care of this task. The frequent lack of institutional strategies concerning digitisation and preservation, problems with establishing digital archives with a viable preservation system and last but not least the general problems with raising funds assigned to digitisation/ preservation activities seem to be the most urgent and serious problems at the moment.

3.2 Remarks

Due to the defined scope of the survey and the predefined focus on the members of LIBER the presented results might only partially describe the current practices in European library landscape.

Due to the fact that that the exact total number of LIBER members with digitisation activities is unknown at the moment and therefore the target population and response rate can not be properly assessed one should be cautious about generalizing the survey results beyond the sample of institutions which they came from. One should also take into account that several distortions might have occurred:

The fact that the use of closed questions where response categories are predefined might have produced responses other that it would be the case for the open ended questions. To prevent this kind of predetermination, the responses categories applied in the questionnaire were pretested to cover the range of all possible answers. Additionally, a free text option was provided to allow the respondents to add other answers to the list and making necessary comments.

One should be also aware that a kind of nonresponse bias might have had an impact on the results received. It is possible that the nonresponse to the survey has been systematically selective in a way that institutions who responded to the survey have relevant characteristics that differ from those who did not. Therefore as the PARSE.Insight report stated "we may only hear the loudest voices" ¹⁵. The relatively positive picture of current digital preservation practices yielded by the results collected should be thus taken with circumspection.

Finally, is important to keep in mind that some answers might have been different if a different person from the same library had filled out a particular questionnaire.

For all those reasons the presented results claim to provide an *indication* of the types of digital preservation practices in use in LIBER network.

3.3 Recommendations

Given the considerable investments made in digitisation activities by some of the LIBER members and the expected rise in volume of digitised material in the future it is highly recommended to:

 Conduct more research on the state-of-the-art within the LIBER network in order to identify the position of each LIBER member on the digitisation/ preservation path.

¹⁵ See the report of the PARSE:Insight project "Insight into digital preservation of research output in Europe.", p. 16: http://www.parse-insight.eu/downloads/PARSE-Insight_D3-1 SurveyAndForumPlatforms final.pdf

- Build groups of members with similar experiences and developments in place and depending on the development stage, assist each group with according measures.
- Help to transfer knowledge and practices from 'advanced players' to beginners/ less experienced ones, i.e. help to share and promote available solutions for workflow models, preservation systems and tools as many of the respondents stated that those are the most challenging areas where more support is needed.
- Support the establishment and implementation of digital preservation infrastructures and policies.

WELCOME

Dear Sir/Madam,

Thank you for participating in the Europeana Travel survey on digital preservation!

The questionnaire has five main sections covering 27 questions.

If you would like to see and print out the survey before filling it out, you can download it as a PDF file under the following link: http://www.mediafire.com/file/zoglmnjngzj/EUROPEANA_TRAVEL_QUESTIONNAIRE.PDF

The term "DIGITAL PRESERVATION" denotes the process of maintaining, in a condition suitable for use, materials produced in digital formats, including preservation of the bit stream and the continued ability to render or display the content represented by the bit stream. The task is compounded by the fact that some digital storage media deteriorate quickly ("bit rot"), and the digital object is inextricably entwined with its access environment (software and hardware), which is evolving in a continuous cycle of innovation and obsolescence.

Please notice that the term "INSTITUTION" used in the questionnaire always refers to your specific library (e.g. university library) and not to its "home institution" (e.g. university).

We thank you in advance for your effort.

A. GE	ENERAL INFORMATION		
1. Pleas	se enter your contact information:		
Your Institut	ion:		
2. In wh	nich country is your institution located?		
	European Union Members	Other	
Country	y		•
3. What	is the size of your institution?		
Sma	all (1-30 FTEs)		
C Med	dium (31-100 FTEs)		
Lar	ge (101-200 FTEs)		
C Ver	ry large (>201 FTEs)		

4. V	Which of the following best describes your institution? (multiple answers possible)
	National library
	Government/federal library
	University library
	Research library
	Other
If o	ther (please specify)
5. V	What is your role in the institution? (multiple answers possible)
	Management
	Collection Development (metadata, cataloguing)
	Digitisation
	Preservation of digital materials
	Library Information Systems (catalogue systems)
	Technical services
	Other
	<u></u>
If o	ther (please specify)
B.	DIGITISATION
6. E	Does your institution digitise materials?
	Yes, we do digitise in-house
	Yes, but we outsource some parts of the digitisation process
	Yes, but we outsource the whole digitisation process
	No, but we plan to do so in the future
	No
	w l
Plea	ase add any comments if necessary

Please state in each case the type of material and the number of digital content objects (and only if necessary the number of pages), e.g.: 5 journals (approximately 200,000 pages), 287 books 50 maps, 2000 postcards

7. what type of n	nateriai nas i	aiready b	een algitis	sed at you	ir institutio	on ?	
Text (journals, bomanuscripts)	oks,						
(Photo)graphical r (images, photogra maps, postcards, e	phs,						
Sound							
Video							
Other please speci	ify						
8. Please estimate	te the total v	olume of	stored di	gitised ma	nterials:		
	1MB-1TB	1 TB- 25TB	25TB- 100TB	100TB- 500TB	500TB- 1PB	>1PB	I don't know
by now:	C	C	C	C	0	C	0
in two years' time:	0	C	C	C	0	C	
Please add any fur	ther commen	ts				A V	
C. POLICIE	S, RESP	ONSIE	BILITIES	SAND	PRESE	RVATI	ON
9. Does your institution) Yes, in-house Yes, but we of Yes, partly institution) No, but we plant No I don't know	utsource this -house, partly	task (plea	ase explain	below to v	vhom)	·	
Your comments				△			

	titution? (multiple answers pos		preservat	ion is assu	nied by you	I
	We assume no responsibility for	digital pres	ervation			
	We are commissioned to act as a	deposit lib	rary for ou	r own institu	ıtion	
	We are a regional/federal/national	al legal depo	osit library			
	We are a deposit library responsi	ble for spec	cial/discipli	nary collect	ions	
	We voluntarily take care as a par	t of our mis	ssion (pleas	se explain fu	rther below)	
	Another institution is taking care	(please giv	e some det	ails below)		
	It is unclear who is taking care					
	We cooperate with other instituti	ons or com	panies (ple	ase give son	ne details bel	low)
You	ar comments		<u>▶</u>]		
11.	What percentage of digitised m	naterials do	o you plan	to preserv	e for long te	erm?
%						
you	r comments					
	Compared to other activities, h	ow urgent	is the dig	ital preserv	ation task fo	or your
	Not urgent					
	Somewhat urgent					
	Urgent					
	Very urgent					
Ple	ase add any further comments				A V	
1 10	ase and any further comments —					
	How important do you conside itised materials for your institut		ving reaso	ons for digi	tal preserva	tion of
		Not important	Somewha importan	t Importan	t Very important	I don't know
wo	econd/repeated digitisation uld not be possible - the	C	C		0	
	terial is too damageable or will lost by then					
A s	econd/repeated digitisation uld be too expensive				0	

		Not So important in	mewhat portant	nportan	very important	I don't know
A second/repeated would not be possi does not belong to We have already le	ble the material our collection	C	C	C	6	C
preservation infra place (for other matherefore we can mather for mathe	aterials) and	6	C	C	C	E
Other (please speci:	fy)		Þ	<u></u>		
14. Does your instruction of di	titution have a wr		or procedu	re that :	addresses tl	ne
Yes No, but we plan No I don't know	n to develop one					
If the policy or prod	cedure is available	online, please	e provide a	URL be	low	
15. How would your materials by your				ital pre	servation of	digitised
	Considerable investments	Small investmen		nvestme made	ents I don	't know
Staff	•	•				3
Storage	0	0				3
Development of workflows	C	C		C	Į.	
Development of tools	E	C		C		
					<u></u>	
Please add any furth	her comments 🖳					

16. Which statements on the institution?	staff involve	ed in digital pre	eservation a	apply best	to your
			Yes	No	I don't know
We have staff assigned exclusion preservation tasks	ively to digit	al	C		
We have digital preservation funding			C	C	C
We have staff for digital prese works also for other sections/e					
We have digital preservation regular budget	staff based o	on our	0	0	
We plan to hire permanent stapreservation	aff for digita	al .			
Please add any further commen	ts			△ ▼	
We plan to spend more on a We plan to retain the level of We plan to spend less on different the plan is not fixed yet	digital preser of expense fo	vation issues or digital preserv	vation issues		
Please add any further commen	ts			△	
D. PRESERVATION	ARRAN	GEMENTS			
18. Which of the following sp implemented to preserve you			sses have	you alread	у
	In house	Outsourced	Planned	We dor do/have t	n't I don't that know
Archive dedicated to digitised collections	C				
Preservation metadata standards	_ E	_ C	_ E		_ C

	In house	Outsourced	Planned	We don't do/have that	I don't know
Use of format restrictions to support preservation	0	E	E	0	
Format validation		E	C	C	
Persistent identifier assignment	0	C		C	
Bit-stream preservation (secure storage, back up, refreshing, etc.)	C	C	C	C	6
Synchronisation/replication with another repository/archive/institution Normalisation	0	C	C	C	C
(conversion/homogenisation of formats on ingest)	0	C	E	C	
Migration Migration on access	0	0	C	C	
(conversion on the fly if object is required by the user)	C	C	E	C	C
Emulation					
Training/Development of staff	0	E	E	0	
Other (please specify)			▲ ▼		

19. Have you already used any of the following audit instruments/self-assessment tools in your repository/archive?

	Yes, already used	Not used but we plan to use	Not used and no plans to use	I don't know
TRAC				
nestor catalogue of criteria		C	0	
DRAMBORA		0	E	
ISO Standards (please specify below)	0	C	C	

▲ ▼	
20. What plans concerning the digital preservation of digiti institution have for the next two years?	sed materials does your
	<u>^</u>
	-
1	Þ
E. COLLABORATION AND SUPPORT NE	EDED
21. What are the biggest challenges for your institution wit preservation of digitised materials in the following areas?	h regard to long-term
a) Technical	<u> </u>
4	▼
,	
22 b) Organisational / Processes	
	~
	<u> </u>
23 c) Strategic / Financial	
	$\overline{\mathbf{v}}$

Your comments or other instruments / tools:

24. Which topics concerning digital preservation the moment (as a subject of a workshop, project of a workshop of a	
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25. What kind of partner institution (with which place) would you be looking for to make progress concerning digital preservat	
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2C. What kind of developments accidence offers	
26. What kind of developments could you offer	as a partner?
4	>
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27. Thank you for completing the survey. If you comments, please use the free-text field below	
If you would like to receive a copy of the result below.	s of this survey, please enter your email
	▼
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Appendix B. Invitation Email

RE: Europeana *Travel* survey on digital preservation of digitised materials.

Dear Sir/Madam,

I'm taking the liberty of addressing my enquiry to you. We would like to invite you, as a member of LIBER, to participate in a survey on digital preservation by EuropeanaTravel. The project aims to digitise content on the theme of travel and tourism and to make it accessible via Europeana, the European digital library, museum and archive. (For more information about the EuropeanaTravel project, please visit the homepage: http://www.europeanatravel.eu/).

The survey:

- is mainly addressing staff involved in areas of digitisation and digital preservation.
- focusses on the digital preservation of digitised materials.
- aims to assess the current digitisation activities and gain insight into the existing digital preservation infrastructures.
- is exclusively designed to collect information about the situation and needs amongst LIBER members.

Please accept our invitation even if your institution is not engaged in digitisation activities. You will in this case be automatically directed to the short version of the questionnaire, which will take you only a few minutes to complete.

We fully appreciate the constraints on your time, but would like to emphasise that your participation in this survey is of great importance to Europeana *Travel* as well as to LIBER. Your answers will help to describe the state-of-the-art in digital preservation of digitised materials, recognise main challenges and define and target the areas where joint action is needed.

The questionnaire takes about 15 minutes to complete and addresses the following topics:

- A: General information about your organisation
- B: Digitisation activities
- C: Policies, responsibilities and preservation
- D: Preservation arrangements
- E: Collaboration and support needed

We kindly request you to complete the online questionnaire by 31 May 2010.

To start the survey, please click on the link below:

http://www.surveymonkey.com/s/EuropeanaTravel_survey

We confirm that all data collected in this survey will be treated as confidential information. Survey results will be aggregated at country level and disseminated amongst LIBER members only.

For further information about this survey, please contact Natalia Bergau, SUB Goettingen, at nbergau@sub.uni-goettingen.de