



EUROPEAN COMMISSION

Brussels, 27.10.2011
SEC(2011) 1274 final

COMMISSION STAFF WORKING PAPER

[\[...\]](#)

Accompanying the document

Commission Recommendation on the digitisation and online accessibility of cultural material and digital preservation

{C(2011) 7579 final}

TABLE OF CONTENTS

1.	Introduction	4
2.	Some key facts and figures on digitisation across the EU	6
3.	The report of the Comité des Sages on bringing Europe’s cultural heritage online	7
4.	Digitisation: overview of current and planned activities	8
4.1.	Developments at EU level.....	8
4.2.	Developments at national level	9
4.3.	Developments at international level (US and other third countries).....	12
5.	Digitisation: quantitative targets and planned financial resources.....	12
5.1.	Developments at EU level.....	12
5.2.	Developments at national level	12
6.	Digitisation: public-private partnerships (PPPs).....	14
6.1.	Developments at EU level.....	14
6.2.	Developments at national level	17
7.	Large-scale digitisation facilities	20
7.1.	Developments at EU level.....	20
7.2.	Developments at national level	21
8.	Online accessibility: access to content through Europeana	22
8.1.	Developments at EU level.....	22
8.2.	Developments at national level	23
9.	Online accessibility: orphan and out-of-print works, public domain works	24
9.1.	Online accessibility: mechanisms for orphan works.....	25
9.1.1.	Developments at EU level.....	25
9.1.2.	Developments at national level	26
9.2.	Online accessibility: mechanisms for out-of-print works	27
9.2.1.	Developments at EU level.....	27
9.2.2.	Developments at national level	28
9.3.	Online accessibility: lists of orphan works and works in the public domain.....	29
9.3.1.	Developments at EU level.....	29
9.3.2.	Developments at national level	29

9.4.	Online accessibility: barriers to the accessibility and use of public domain works...	30
9.4.1.	Developments at EU level.....	30
9.4.2.	Developments at national level	31
10.	Digital preservation	32
10.1.	Developments at EU level.....	32
10.2.	Digital preservation: national strategies and plans.....	32
11.	Digital preservation: exchange of information at European level	34
12.	Digital preservation: multiple copying and migration for preservation purposes.....	34
13.	Digital preservation: digital legal deposit	35
14.	Digital preservation: web harvesting	36

1. INTRODUCTION

The Digital Agenda for Europe has set out the Commission's vision and ambitions for the information society, and defined the actions necessary to maximise the contribution of information and communication technologies to the wider Europe 2020 strategy for a smart, sustainable and inclusive economy. One of the key areas tackled by the Digital Agenda is the digitisation of our cultural heritage and the further development of Europeana, Europe's digital library, archive and museum.

The digitisation of cultural collections makes knowledge resources from Europe's cultural institutions — books, maps, audio, films, manuscripts, museum objects, etc. — more easily accessible to all for work, study and leisure. At the same time, digitisation turns these resources into a lasting asset for the digital economy, creating huge opportunities for innovation.

Digitising our cultural heritage is an enormous task. A study carried out to inform the work of the '*Comité des Sages* on bringing Europe's cultural heritage online' estimates the cost of digitising Europe's entire cultural heritage at 100 billion euros. The *Comité des Sages* has indicated that Member States need to considerably increase their funding for digitisation in order to generate jobs and growth in the future, acknowledging that progress can only be incremental, that careful planning of digitisation activities is necessary, and that private investment is needed to complement the scarce public resources available.

This staff working document reviews and assesses the overall progress achieved in the European Union in the areas of digitisation and digital preservation, and considers the progress made by Member States in implementing the Commission Recommendation of 24 August 2006 on the digitisation and online accessibility of cultural material and digital preservation (2006/585/EC), as well as the related Council Conclusions of 13 November 2006 (2006/C 297/01)¹

The staff working document covers the 27 EU Member States as well as the 3 non-EU European Economic Area countries (Norway, Iceland, Liechtenstein) to which the Recommendation is applicable. With Switzerland², the report therefore covers a total of 31 countries.

The structure of the report follows that of the Commission Recommendation and Council Conclusions, focusing on three main areas: a) digitisation; b) online access; c) digital preservation.

The findings and conclusions build on a set of input documents and consultation processes, in particular:

¹ The Commission presented a first report in 2008, with its Communication — 'Europe's cultural heritage at the click of a mouse: progress on the digitisation and online accessibility of cultural material and digital preservation across the EU' (COM/2008/0513) — and the accompanying Staff Working Paper (SEC/2008/2372).

² Switzerland participates as an observer in the Member States' Expert Group on Digitisation and Digital Preservation.

- the second set of national reports submitted in 2010³,
- the report ‘The new Renaissance’ by the *Comité des Sages* on bringing Europe’s cultural heritage online, as well as the public consultation (1258 replies) and the public hearing conducted by the *Comité*⁴,
- the Commission Communication on ‘Europeana — next steps’, adopted in 2009 (with the related online consultation), the Council Conclusions on Europeana adopted in 2008 and 2010, as well as the European Parliament Resolution adopted in 2010⁵,
- exchanges of best practices and information at meetings of the Member States’ Expert Group on Digitisation and Digital Preservation⁶.

The overall assessment of progress also makes use of the findings of the NUMERIC study⁷ and other sources at national and EU level. It combines a quantitative overview of the situation in all countries (see Table 1) with more qualitative assessments based on examples from national reports (in italics).

The digitisation of their assets will help Europe’s cultural institutions to continue with their mission of giving access to and preserving our heritage in the digital environment. It will also provide an important input to the creative industries, which account for 3.3% of EU GDP and 3% of employment⁸. These industries are faced with a digital transition that is shaking up traditional models, transforming value chains and calling for new business models. Digitising and providing wider access to cultural resources is an essential condition for the further development of Europe’s cultural and creative capacities and its industrial presence in this field.

Europe is a leading international player in the field of cultural and content businesses. This position is based on its rich and diverse cultural heritage: the quality and quantity of European cultural material offer a fantastic opportunity for the content industry to generate smart growth and jobs. However, there is a risk that Europe loses the edge as regards the digitisation and digital preservation of its cultural assets, to the benefit of other economic regions. As underlined by the *Comité des Sages*, time is crucial in this area: a slow pace in investment in digitisation could lead to missed opportunities

³ http://ec.europa.eu/information_society/activities/digital_libraries/other_expert_groups/mseg/reports2010/index_en.htm (the graphs refers to the question replies given in the national reports).

⁴ http://ec.europa.eu/information_society/activities/digital_libraries/comite_des_sages/index_en.htm.

⁵ http://ec.europa.eu/information_society/activities/digital_libraries/timeline/index_en.htm.

⁶ http://ec.europa.eu/information_society/activities/digital_libraries/other_groups/mseg/meetings/index_en.htm.

⁷ NUMERIC Study: Developing a statistical framework for measuring the progress made in the digitisation of cultural materials and content, Chartered Instituted of Public Finance and Accountancy (CIPFA), 2009 (<http://www.numeric.ws/>).

⁸ EU Competitiveness Report 2010.

2. SOME KEY FACTS AND FIGURES ON DIGITISATION ACROSS THE EU

	Projected annual digitisation budget (EUR)*	Projected digitisation budget per head of population (EUR)*	Presence of large PPPs for digitisation of cultural heritage**	Digitisation resources: % of public funding*	Reported use of structural funds for digitisation of cultural heritage**	% of already digitised objects in National Libraries*	Europeana content by country — % of the total number of objects***
AUSTRIA	6 777 804	0.81	Yes	79%	No	2%	1.5%
BELGIUM	11 423 295	1.07	No	99%	No	NA	1.7%
BULGARIA	554 225	0.07	No	90%	No	NA	0.2%
CYPRUS	944 094	1.20	No	57%	No	0%	<0.1%
CZECH REP	3 874 584	0.37	No	99%	Yes	2%	0.2%
DENMARK	2 163 140	0.40	Yes	94%	No	1%	0.3%
ESTONIA	1 319 747	0.98	No	91%	No	1%	0.4%
FINLAND	3 559 065	0.67	No	85%	Yes	1%	4.1%
FRANCE	37 083 843	0.58	Yes	94%	No	NA	14.2%
GERMANY	46 848 760	0.57	Yes	95%	No	2%	16.3%
GREECE	7 453 711	0.66	No	89%	Yes	NA	1.1%
HUNGARY	4 085 523	0.41	No	89%	No	1%	0.6%
IRELAND	3 337 785	0.76	No	94%	No	NA	4.9%
ITALY	13 205 601	0.22	Yes	95%	No	4%	10.0%
LATVIA	1 366 386	0.60	No	99%	Yes	NA	0.2%
LITHUANIA	675 715	0.20	No	100%	Yes	NA	<0.1%
LUXEMBOURG	502 672	1.04	No	100%	No	NA	0.2%
MALTA	122 232	0.30	No	NA	No	NA	0.3%
NETHERLANDS	27 714 056	1.69	Yes	90%	No	2%	6.2%
POLAND	1 323 001	0.03	No	96%	No	1%	3.3%
PORTUGAL	788 996	0.07	No	82%	No	1%	0.1%
ROMANIA	2 080 160	0.10	No	87%	No	NA	0.2%
SLOVAKIA	835 160	0.15	No	100%	Yes	1%	0.4%
SLOVENIA	2 147 556	1.06	No	100%	No	2%	1.3%
SPAIN	6 661 228	0.15	Yes	91%	No	NA	8.5%
SWEDEN	30 051 891	3.27	No	91%	Yes	NA	7.7%
UNITED KINGDOM	43 859 503	0.72	Yes	55%	No	1%	4.9%

Sources: * NUMERIC (2009) NA=no data available; ** National reports (2010); *** Europeana Office (2011); the total does not add up to 100% due to non-EU countries contributing to Europeana (in particular Norway, Switzerland and Iceland), and objects from pan-European projects that are not attributed to a particular Member State

3. THE REPORT OF THE *COMITÉ DES SAGES* ON BRINGING EUROPE'S CULTURAL HERITAGE ONLINE

On 10 January 2011, the '*Comité des Sages* on bringing Europe's cultural heritage online' presented its conclusions to the Commission. The *Comité* consisted of a small group of eminent thinkers selected on the basis of their knowledge, experience and track record as visionary thinkers in the areas of culture and technology.

Their report '*The New Renaissance*' calls on the Member States and the Commission to assure online access to our cultural heritage for all. It indicates that digitisation is more than a technical option, rather a moral obligation, and underlines the role of the public sector in funding the digitisation process. The *Comité* indicates that private sector involvement should be encouraged to speed up digitisation, and that digitised content can be used to nurture a range of private activities and initiatives.

The *Comité* signals a series of barriers to the digitisation and online accessibility of cultural material and puts recommendations to the Commission, the Member States and their cultural institutions.

The report makes the following key recommendations:

- Works that are covered by copyright, but are no longer distributed commercially, need to be brought online. It is primarily the role of rights holders to digitise these works and exploit them. But if rights holders do not do so, cultural institutions must have a window of opportunity to digitise material and make it available to the public, for which rights holders should be remunerated.
- EU rules for orphan works (whose rights holders cannot be identified) need to be adopted as soon as possible. The Report defines eight fundamental conditions for any solution.
- The Europeana portal should become the central reference point for Europe's online cultural heritage. Member States must ensure that all material digitised with public funding is available on the site, and bring all their public domain masterpieces into Europeana by 2016. Cultural institutions, the European Commission and Member States should actively and widely promote Europeana.
- Member States need to considerably increase their funding for digitisation in order to generate jobs and growth in the future.
- Public-private partnerships for digitisation must be encouraged. They must be transparent, non-exclusive and equitable for all partners, and must result in cross-border access to the digitised material for all. Preferential use of the digitised material granted to the private partner should not exceed seven years.
- To guarantee the long-term availability of digital collections, Europeana — in the medium term — could also be given a role in their preservation. In addition, a system should be developed so that any cultural material that currently needs to be deposited in several countries would only be deposited once.

The *Comité* stresses that action on all these points is necessary now. ‘Time is of the essence. Global competition is harsh and Europe risks missing out on the infinite opportunities of the digital shift.’

With reference to the ways in which digitised cultural content can stimulate economic growth and job-creation, the *Comité* points to three main areas:

- The digitisation process itself and the technologies linked to it. If European companies can develop the most efficient technologies and working methods in this field, they will be the first to benefit from public contracts for digitisation. The process of digitisation is also labour intensive and will generate new jobs.
- As raw material for services and products in areas such as tourism, education and new technologies. The arrival of millions of new digitised cultural works online is likely to spur a wave of innovation and new business models for companies specialised in various stages of the digitisation chain. One example is Arkhopôle, based in the French Aquitaine region. It is a cluster of 125 SMEs who collaborate with cultural institutions and universities. They specialise in the creation and commercialisation of cultural content and strive to develop in France and Europe a new market for digital heritage material. In addition, there is economic value in the new knowledge and information associated to the digitised material, for example the new insights that can help to develop language technologies and automatic translation tools.
- The area of storage, preservation, and processing of digital material. These activities are likely to be an important field for experimentation and innovation in the coming years as companies and cultural heritage institutions are managing bigger and bigger databases.

4. DIGITISATION: OVERVIEW OF CURRENT AND PLANNED ACTIVITIES

4.1. Developments at EU level

Preliminary empirical evidence provided by the NUMERIC study (2009) indicates that within the EU the vast majority of cultural objects worth digitising are not yet digitised. For national libraries, according to the available data, only about 3% of relevant cultural objects have been digitised. If all types of cultural institutions are considered (libraries, museums, archives and audiovisual archives), the percentage of objects already digitised is higher, but still a fraction of the collections. The issue of developing reliable statistics on the digitisation of cultural heritage and its usage was first addressed by the NUMERIC study. The study, launched by the European Commission in 2007 and concluded in 2009, constitutes the starting point and a first attempt in providing digitisation statistics, largely based on estimates using incomplete empirical data. Follow-up activities with the involvement of the Member States’ Expert Group on Digitisation and Digital Preservation are being developed by another EU co-funded project, ENUMERATE (<http://enumerate.eu/>). The NUMERIC data presented in this report are to be considered as first estimates based on an incompletely validated statistical methodology.

The table below summarises the proportions of collections that do not need to be digitised, based on the figures from the NUMERIC study, along with a rough estimate of the proportions remaining to be digitised.

Table 2: Progress in digitisation by type of cultural institution

Institution	No need to digitise	Digitisation completed	Awaiting digitisation
Archives	36%	1%	63%
Broadcasters	28%	6%	66%
Museums	3%	25%	72%
Libraries	69%	1%	30%
Other	0%	15%	85%
TOTAL	31%	11%	58%

Source: Collection Trust (2010)

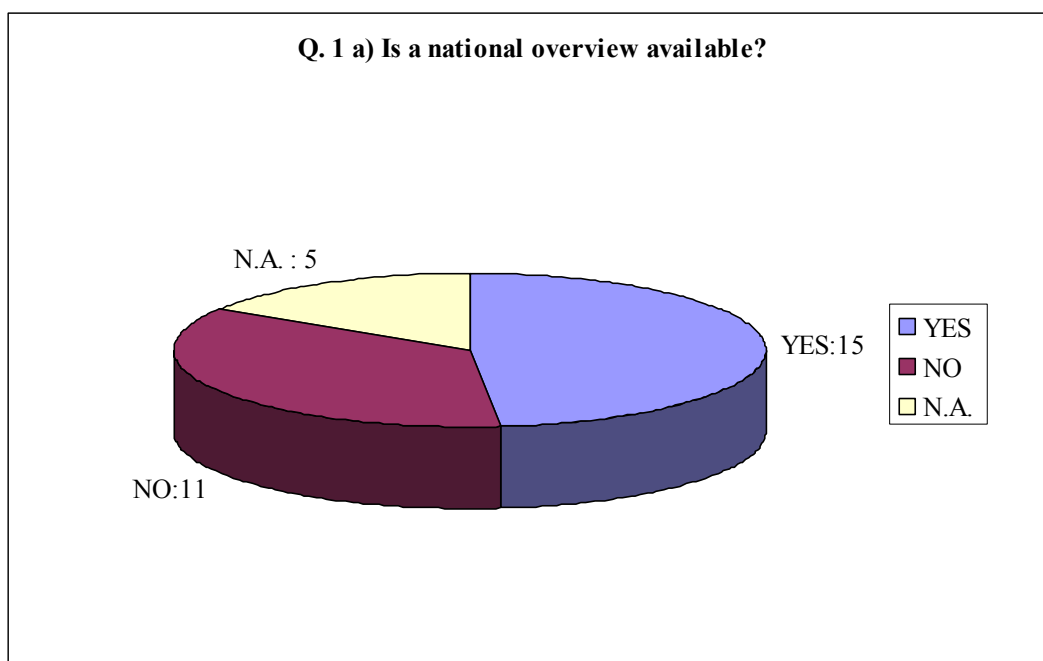
4.2. Developments at national level

Since the publication of the Commission Recommendation in 2006, the digitisation of cultural materials has increased significantly. For example, according to the Finnish national overview, the number of digital objects more than doubled in the period 2008-2010 (from 4 to 10 million). Nevertheless, cultural institutions of all kinds are still a long way from completing this work, which is still in its initial stages. Given the large number of objects still to be digitised, the existence of national digitisation overviews may play a crucial role in improving effectiveness, and Member States are progressively putting in place such overviews. The Recommendation calls on Member States to gather information about current and planned digitisation of cultural material, and to create overviews in order to prevent duplication of efforts and to promote collaboration and synergies at European level. The national reports clearly indicate that inventories, overviews and databases are increasingly being set up and integrated to ensure a cross-sectoral and national dimension.

Czech Republic: *In 2009, the Ministry of Culture carried out for the first time in history an extensive questionnaire survey among national cultural organisations (institutions receiving contributions from the state budget) concerning digitisation. The survey addressed 31 cultural organisations with a national dimension.*

Germany: *The survey 'Inventory on the digitisation of cultural artefacts and fields of action' was carried out on behalf of the Federal Government Commissioner for Culture and the Media and the Federal Ministry of Education and Research in the course of planning the German Digital Library (DDB).*

Sweden: *The Swedish Arts Council has gathered and consolidated information concerning the digitisation activities of 26 state archives, libraries and museums, as well as many other cultural institutions at regional level.*



In general, 15 countries state that they have national overviews or registers in place for systematically collecting information on the progress, content, number and accessibility of digitised items. In contrast, 11 countries still have not developed any national overviews of digitised collections. Some countries, although they have no national overviews with cross-sectoral coverage, indicate they have sector-specific (or institution- or project-specific) overviews or are in the process of developing national strategies.

The development of national digitisation overviews is often coupled with the creation of national aggregators and portals for online access to cultural heritage.

Spain has recently created *Hispana*, the Directory and Harvester of Digital Resources, promoted by the Ministry of Culture at national level. It currently includes 120 digital repositories and 439 projects. The previous report sent to the European Commission in February 2008 noted that 157 digital collections were included in DRRD, the precursor to *Hispana*. There has thus been an increase of around 300% over the past 2 years.

In *Lithuania*, cultural and scientific heritage is held on a virtual information system for digital cultural heritage, 'epaveldas' (e-heritage). It became a national system in 2009. The system comprises a database of digital objects with at present 3 million pages (archive files, manuscripts, books, posters, paintings and graphics, photographs and other objects) and a portal.

Austria: The Austrian cultural heritage institutions have created a central online portal for digitised assets — 'Kulturpool'. It aims to stimulate closer cooperation between the arts, culture, education and science sectors, offering cross-disciplinary access and contextual information. It will also serve as a national cross-domain aggregator for Europeana.

The 2008 implementation report had highlighted that only a proportion of all digitised items are actually accessible on the web. This fact is confirmed by the 2010 national reports of several Member States, such as Portugal, Poland and Sweden. Moreover, the number of digitised museum items accessible online tends to be lower than for libraries and archives.

In Poland at the end of 2009:

- Libraries had around 500 000 digital objects (over 400 000 accessible via the internet), with a large number (approx. 350 000) searchable in the database run by the Digital Libraries Federation.

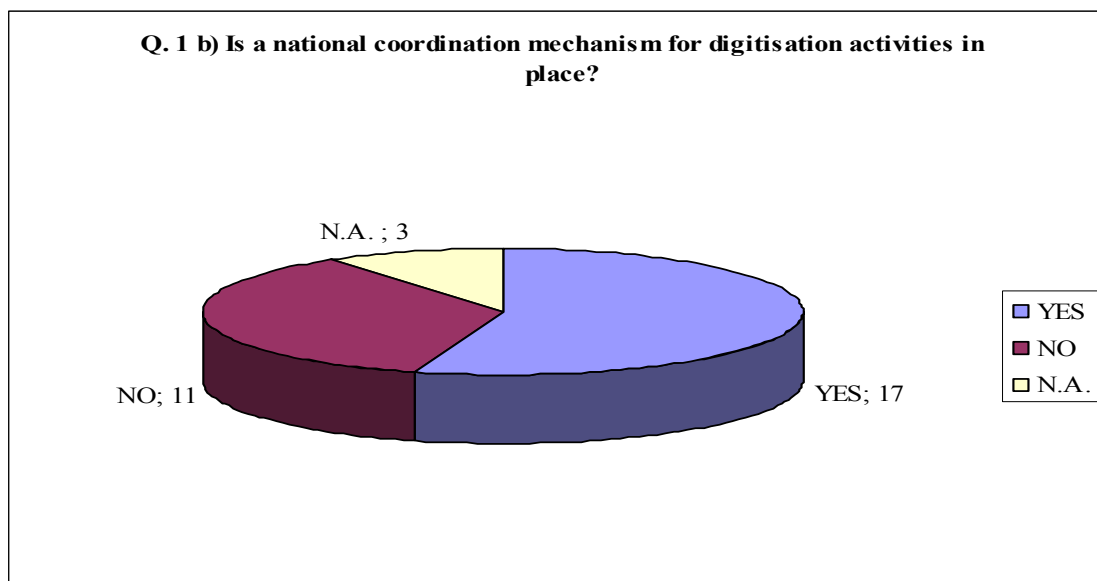
- Archives contained around 1 000 000 digital objects (approx. 200 000 accessible via the internet).

- Museums had around 300 000 digital objects (mainly for own needs, 1-2% accessible via the internet in the form of virtual exhibitions).

As digitisation is a vast, expensive, time-consuming and long-term activity within a rapidly changing environment, national overviews of the ongoing and planned digitisation of a wide range of cultural items are turning out to be not only useful but necessary. They help to determine what remains to be digitised and what are the best ways to do it, but also help to prevent duplication of effort, decrease costs, and encourage cooperation between cultural bodies within Member States and at European level.

Digitisation — national coordination mechanism for digitisation activities

According to the national reports, 17 Member States have national coordination mechanisms for digitisation activities, bringing together representatives from public authorities, cultural heritage institutions and other organisations active in the field. 11 countries stated they had no such mechanisms, although some either have them on a sector-specific basis, or have started developing them.



The structure of the coordination mechanisms for digitisation activities vary between countries. Most come under the ministries of culture and/or education (Czech Republic, Denmark, Finland, Greece, Italy, Latvia, Lithuania, Slovakia). Others function as working groups (Bulgaria, Luxembourg, Slovenia), foundations (Netherlands), councils and committees for digitisation (France, Spain, Estonia), state agencies (Latvia), or competence centres (Poland). Their competences include drawing up national digitisation strategies, implementing digitisation policies and projects, coordinating digitisation activities through dialogue with the main heritage institutions, developing a common infrastructure and services, preparing quality guidelines, and, finally, monitoring the digitisation process.

4.3. Developments at international level (US and other third countries).

Beyond the EU borders, major digitisation projects are currently being developed, with the aim to create or contribute to the creation of digital libraries. The following 4 initiatives have, to different degrees, a cross-continental dimension (they involve cultural organisations from more continents), and are led by US organisations:

Google Books: 15 million books scanned between 2004 and 2010; target: 130 million books by 2020;

Open Content Alliance, coordinated by the Internet Archive: 1-2 million scanned books are currently available;

the Universal Digital Library (Million Book collection), coordinated by the Carnegie Mellon University: project completed, 1 million books scanned and available online;

World Digital Library (US Library of Congress and UNESCO): about 2000 highly valuable cultural items scanned and freely available.

Moreover, eminent American librarians have recently advocated the creation of a US Digital Public Library, as a network of the existing digitization initiatives in the different sectors (libraries, museums, archives, audiovisual), based on the model of Europeana.

Japan, Egypt and Australia should also be mentioned for having invested considerable budgets in digitisation of cultural heritage and in the creation of digital libraries.

5. DIGITISATION: QUANTITATIVE TARGETS AND PLANNED FINANCIAL RESOURCES

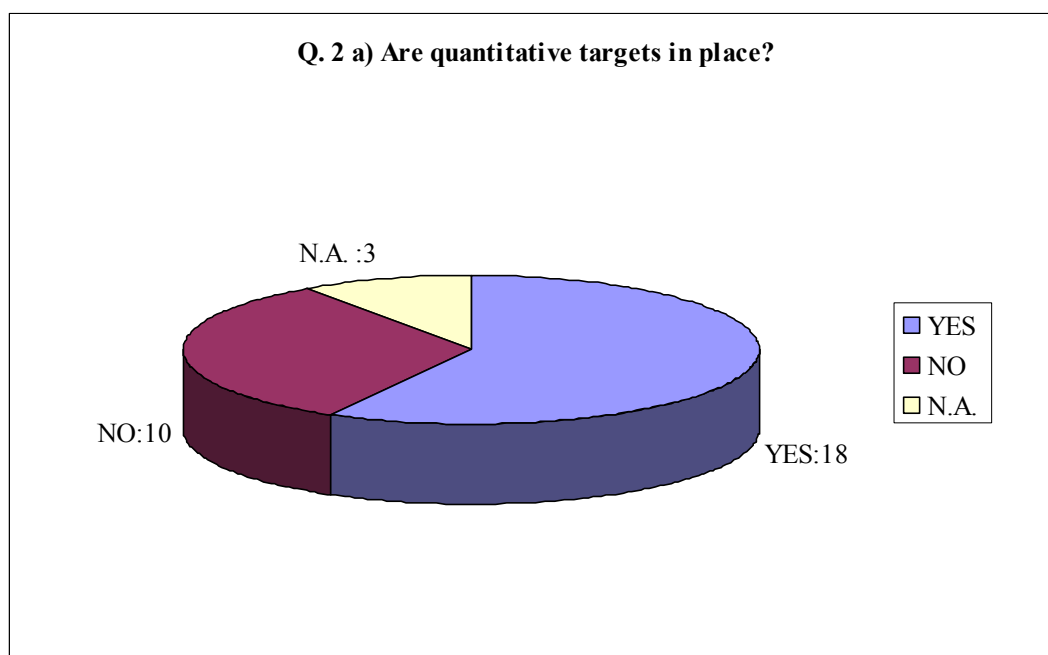
5.1. Developments at EU level

The European Commission has contributed to progress in digitisation by support for technologies to make digitisation cheaper and better (under the Framework Programmes for R&D). The Structural Funds have been used by several Member States for digitisation. Furthermore, the Commission has contributed to the development of Europeana and meeting Europeana's quantitative targets for digitisation and aggregation of digitised cultural heritage through the eContentplus, CIP-ICT-PSP and Culture programmes.

According to the NUMERIC study, the projected (estimated) annual digitisation budget per head of the population is on average €0.50 per person in the EU, ranging from €0.03 in Poland to €3.27 in Sweden (see Table 1).

5.2. Developments at national level

The establishment of quantitative targets is important as it helps ensure a better focus on current and planned activities, increases efficiency and effectiveness, and improves the predictability of the required resources. The Recommendation calls on Member States to develop quantitative targets for the digitisation of analogue material and indicate the budgets to be allocated by public authorities.



Although quantitative targets exist in most Member States, they are rarely aggregated at national level in a comprehensive planning document. They usually concern a specific domain (libraries, archives, museums or audiovisual archives), and are established ‘bottom-up’ by the individual institutions themselves. Quite often they are presented just qualitatively, and with a few exceptions lack precise operational definitions.

***In Norway,** the National Library has both quantitative and qualitative targets. The objective is to digitise 245 000 objects in 2010, which will bring the total number of digitised objects in the National Library to 1 400 000. As of January 2009, the National Archives had digitised 2 000 shelf metres out of a total of 209 000 shelf metres. The plan is to digitise 10% of the total, equal to 20 000 shelf metres. In view of the expected growth in the physical archives in coming years, the target may extend to 60 000 shelf metres.*

***Netherlands:** The Royal Library’s strategic plan for 2010-2013 encompasses 10% of all Dutch books, 50% of all Dutch born-digital publications, and 600 000 images. The Images for the Future project will digitise 137 200 hours of video, 22 510 hours of film, 123 900 audio recordings and 2 million photographs. Under the strategic plan of the National Archives for 2010-2013, between 5% and 10% of the total collection is to be digitised and available online by 2015-2020. This translates into approximately 63 million pages of manuscripts, 25 000 maps and 1.3 million photographs.*

Progress in the digitisation of cultural heritage depends on the long-term financing. However, many countries still have no national budget assigned to such activities. Digitisation is still mainly financed from the institutions’ own resources, while project-based financing through national and EU funds (e.g. EU Structural Funds) is a second source.

Some countries report the sum total of public budgets at national level specifically devoted to the digitisation of cultural heritage on an annual basis. This is the case with France (over €30 million), Spain (€8.7 million) and Finland (€6.2 million). Other countries indicate such budgets on a multiannual basis, e.g. the Czech Republic with €34 million and Belgium with €27 million over a period of 5 years.

6. DIGITISATION: PUBLIC-PRIVATE PARTNERSHIPS (PPPs)

6.1. Developments at EU level

Alongside the call in the Recommendation for Member States to encourage PPPs, the work of two advisory groups at EU level has been very important in highlighting how properly designed PPPs are fundamental for progress in digitisation: the High Level Expert Group on Digital Libraries⁹ and the ‘*Comité des Sages* on bringing Europe’s cultural heritage online’¹⁰.

Digitisation costs in Europe are still by and large funded by public budgets, according to the NUMERIC study. The cultural institutions’ own resources are the main source of funding for digitisation with 62%, followed by other public funding through project-based grants (30%). The private sector therefore contributes less than 10% of the total, including donations and other forms of support (contributions in kind, other revenues from commercial arrangements, PPPs).

⁹ http://ec.europa.eu/information_society/activities/digital_libraries/other_groups/hleg/index_en.htm.

¹⁰ http://ec.europa.eu/information_society/activities/digital_libraries/comite_des_sages/index_en.htm.

Table 3: Funding of digitisation — sources

	OWN RESOURCES	GOVERNMENT PROGRAMMES	PRIVATE DONATIONS	OTHER SUPPORT
AUSTRIA	67 %	12 %	12 %	9 %
BELGIUM	76 %	23 %	1 %	1 %
BULGARIA	55 %	35 %	1 %	9 %
CYPRUS	18 %	39 %	39 %	4 %
CZECH REP	50 %	49 %	0 %	1 %
DENMARK	63 %	31 %	5 %	0 %
ESTONIA	69 %	22 %	2 %	7 %
FINLAND	76 %	9 %	10 %	5 %
FRANCE	67 %	27 %	4 %	3 %
GERMANY	80 %	15 %	3 %	2 %
GREECE	40 %	49 %	0 %	11 %
HUNGARY	46 %	43 %	4 %	7 %
IRELAND	71 %	23 %	0 %	7 %
ITALY	38 %	57 %	1 %	5 %
LATVIA	94 %	5 %	0 %	1 %
LITHUANIA	92 %	8 %	0 %	0 %
LUXEMBOURG	63 %	38 %	0 %	0 %
MALTA	0 %	0 %	0 %	0 %
NETHERLANDS	59 %	31 %	9 %	1 %
POLAND	77 %	19 %	0 %	4 %
PORTUGAL	54 %	28 %	1 %	17 %
ROMANIA	87 %	0 %	8 %	5 %
SLOVAKIA	22 %	78 %	0 %	0 %
SLOVENIA	48 %	52 %	0 %	0 %
SPAIN	47 %	44 %	4 %	6 %
SWEDEN	26 %	65 %	1 %	8 %
UNITED KINGDOM	31 %	24 %	26 %	18 %

Source: NUMERIC (2009)

A typology of PPPs

The different forms of PPP existing in Europe for the digitisation of cultural assets can be grouped into 5-6 different categories depending on the organisational set-up and business model:

- **Sponsoring/donation:** in the case of sponsorship, the private partner provides financing and receives a benefit in terms of branding/advertising. A distinction is

often made between sponsorship and donation, where the private partner provides support without receiving any benefit (branding/advertising can be forbidden by law). In both cases, the private partner is not interested in exploiting the digitised content, but in enhancing its corporate image. These forms of PPPs are based on tax regimes where sponsors/donors can enjoy fiscal benefits (examples: Telefonica – Spanish National Library in Spain, Cervantes Virtual Library in Spain). Private sponsors/donors are more often business organisations, banks, or foundations, which can also be linked to business organisations. The funding of digitisation by private actors can be based on philanthropic or other more specific motivations, such as religious beliefs: more countries have reported archive digitisation sponsorships with the Genealogical Society of Utah (Mormon LDS Church). Another interesting model is sponsorship at individual level: ‘adopt-a-book’ projects where members of the public can sponsor the digitisation of a book and have their names mentioned on the digital copy (Denmark, France).

- **Indirect commercial exploitation** — PPPs between companies like Google and cultural institutions, as part of the Google Book project – Library Programme (and more recently Google Art) use digitisation as a component of their wider business model, where the digital copy of public domain works is normally accessible for free to the end user. Although Google has not been explicit about its detailed business model, enhancing the quality of its services as a search engine seems to be a core business objective. The recent launch of ‘Google e-books’ — based on agreements with publishers for bringing in-copyright works online — casts new light on Google’s ambitions in the digital book market.
- **Direct commercial exploitation** — The investment by the private partner in digitisation is ‘paid back’ by the direct exploitation of the digitised content: access to content, including public domain works, is sold to the end user. This exclusivity is normally limited in time, after which the digitised material can be made available to everybody. Moreover, the cultural institution receives a digital copy, although any free-of-charge dissemination of this ‘library copy’ is normally geographically bound (on-site or within the country, based on IP address control) or limited to certain institutional users (e.g. education and research communities). Examples: ProQuest PPPs for early European books: Danish Royal Library, Biblioteca Nazionale Centrale di Firenze, Dutch Royal Library; Cengage Gale — British Library; Bloomsbury — The National Archives.
- **Collaborative digitisation:** using ‘bottom-up’ Web2 features, the potential of distributed digitisation schemes based on the active involvement of private individuals should not be underestimated (crowd-sourcing). In such schemes the private partner is not a business organisation, but a multitude of people providing either manpower or ‘micro-funding’ to digitise collections.
- **Service provision:** a mere service contract where a cultural institution buys a digitisation service from a private company should not be considered as a PPP. However, there might be more complex cases where the exchange is not limited to ‘service in return for price’ and the concept of PPP would fit (example: the announced digitisation PPP launched by the Belgian Federal Government with the participation of a consortium involving IBM and Belgacom).

- **Grant and loan programmes:** public grant and loan schemes with the involvement of private partners are another solution for funding the digitisation of cultural assets. As with service provision, their classification as PPPs is not straightforward. Concerning loan schemes, the challenge is to generate an actual return on investment in the medium term to pay back the loan. Few but significant cases were reported by France and the Netherlands.

New methods for promoting PPPs are emerging: in order to facilitate the creation of PPPs, French and German authorities have recently decided to issue open national calls. In France, the evaluation of proposals will be based on the PPP principles and conditions recommended by the *Comité des Sages*. The calls are not associated with a public budget and could provide an interesting method to generate innovative and balanced PPPs. They will also give a better insight as to which (types of) companies are willing to and interested in funding digitisation, as part of their business processes or because they want to be associated with access to culture.

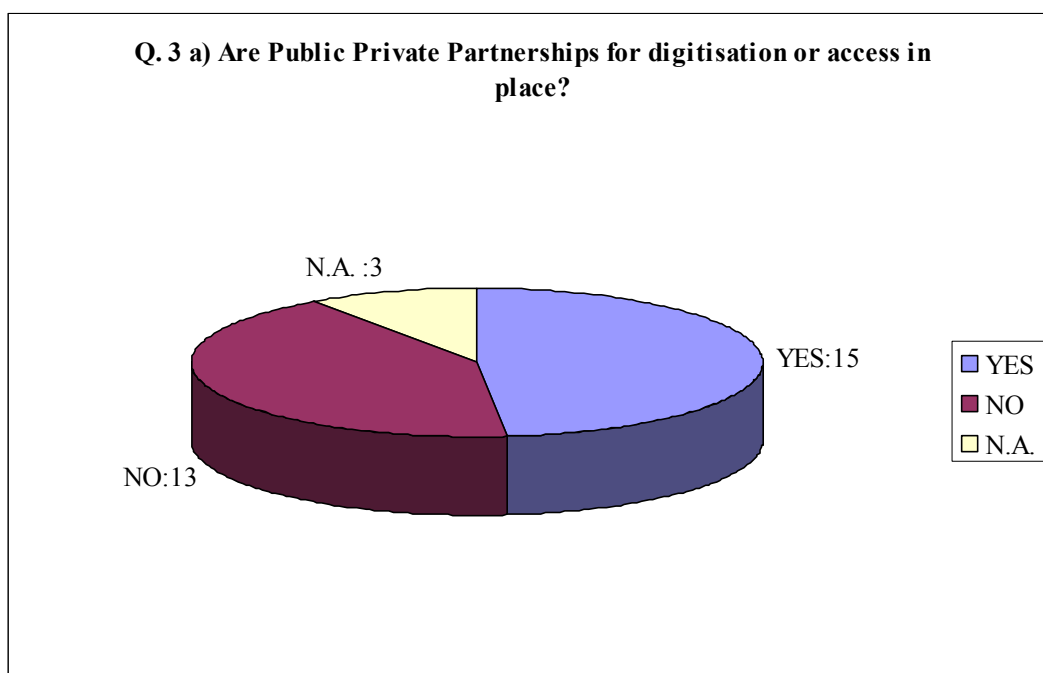
The **report of the *Comité des Sages*** on bringing Europe's cultural heritage online gave clear indications as to which models will work best. Such models are based on:

- respect for rights holders,
- transparency in the process of reaching agreements and in the agreements themselves,
- maximising access at cross-border level to the digitised material,
- quality of the copies that the cultural institutions get from the private partners and possibilities to re-use the files in non-commercial contexts,
- schemes for sharing revenue between the private partner and the cultural institution,
- non-exclusivity — preferential use of material digitised in public-private partnerships should be limited to a maximum of 7 years.

6.2. Developments at national level

The Recommendation calls on Member States to encourage partnerships between cultural institutions and the private sector in order to create new ways of funding the digitisation of cultural material. About half the countries surveyed report the existence of public-private partnerships (PPP) for digitisation or other tasks related to the development, accessibility, preservation and maintenance of digital libraries.

From a qualitative analysis of the replies, however, it emerges that standard service contracts are often reported as PPPs. This is probably due to a semantic and legal uncertainty about the exact distinction between a normal service contract (e.g. a cultural institution buys a digitisation service from a private company) and a proper PPP for digitisation, where the private partner should contribute a substantial investment, often with a certain financial risk. Due to this ambiguity, PPPs are probably over-reported.



Moreover, Member States replying ‘yes’ to the question ‘Are public-private partnerships in place?’ often mention just one or two cases of PPP in the whole country. The overall picture emerging from national reports is rather that genuine PPPs are not yet a widespread method for financing digitisation by cultural institutions in Europe.

Large-scale PPPs, where the public and private partners are big organisations, although limited in number, are proving viable, while PPPs involving medium- and small-scale cultural organisations have difficulties in emerging. A tentative explanation is provided by the United Kingdom report, suggesting that what would attract private investment is not content as such, but rather ‘attention and authority’, i.e. the throughput in users that a cultural institution can generate.

A few countries have more PPPs than others: this is the case, for example, with the United Kingdom (British Library – Microsoft; Oxford University Library – Google and Proquest) and Spain (National Library – Telefonica; Library of Catalonia – Google; Complutense University of Madrid – Google; The Cervantes Virtual Library).

***United Kingdom:** There are two main examples of digitisation funded and delivered through public-private partnership in the UK. The first is the **British Library (BL)**, which has made significant advances in the digitisation and online accessibility of its collections through a number of medium- to large-scale partnerships. The first of these, a partnership between the BL and Microsoft, was announced in 2005. It aimed to digitise 25 million pages from more than 100 000 out-of-copyright books. The partnership came to an end in 2008, having successfully digitised some 60 000 books, and the resulting digital material continues to be available from the British Library. The initial partnership also appears to have borne further fruit with the recent announcement of a joint British Library/Microsoft platform called the **Research Information Centre (RIC)**. Essentially an online collaborative environment, the RIC enables teams of researchers to collaborate via the internet using a common set of digital research resources.*

The second significant example is the **Bodleian Library at Oxford**, which is currently engaged in two successful public-private partnership initiatives to digitise their collections. The first of these is with ProQuest, to digitise some 65 000 items from the John Johnston archive of printed ephemera. The second Bodleian initiative is a partnership with Google to digitise the majority of its out-of-copyright works (i.e. those published before 1885).

Spain: At the beginning of 2008, the **National Library (BNE)** obtained sponsorship from Telefonica of €10m over 5 years for the digitisation of over 200 000 digital objects. Sponsorship by a leading technological partner is enabling the Hispanic Digital Library, part of the BNE, to gain access to the latest technologies in the digital field.

The **Library of Catalonia**, in collaboration with the libraries of the Monastery of Montserrat, the Episcopal Public Library of the Barcelona Seminary and the Library of the Barcelona Athenaeum, participates in the Google Books project, which plans to digitise over 100 000 documents in the public domain, some of which are already accessible. The **Complutense University of Madrid** was the first non-English-language library to sign an agreement with Google to participate in the Google Books project. It currently has over 70 000 digitised documents. The **Cervantes Virtual Library** continues to support the digitisation of fundamental elements of Spanish culture.

In **France**, the issue of public-private partnerships, in particular the relationship between French cultural institutions and Google, has assumed a relatively high profile in the political debate. This discussion has led to the Task Force on the Digitisation of Written Heritage ('Tessier report'¹¹), which proposed a set of possible solutions at both national and European level.

PPPs reported by national organisations include:

- An agreement between the National Library (BnF) and the National Publishers Association (SNE) to pilot a common access solution through Gallica for both copyright works and works in the public domain.
- An agreement between the National Audiovisual Institute (INA) and the television channel TF1 to commercially exploit its news archives under a world exclusivity clause for professional use.
- 'Investissements de l'avenir', to promote the digitisation of works that are no longer commercially available. It provides loans to publishers to digitise their books, which they can then exploit collectively or individually. A similar scheme in the audiovisual sector covers 10 000 films from after 1929.

The position of Google as the main private actor in digitisation PPPs in Europe has further strengthened since 2008: as part of its Google Books project, Google currently has agreements with libraries in the United Kingdom (Bodleian Library at Oxford, British Library), Germany (Bavarian State Library), Spain (Complutense University of Madrid, Library of Catalonia), Belgium (Ghent University), Switzerland (University Library of Lausanne), France (Lyon Library), Italy (Culture Ministry), Austria (National Library) and the Netherlands (Royal Library). Certain Member States have reported on issues addressed

¹¹ <http://www.culture.gouv.fr/mcc/Actualites/A-la-une/Mission-sur-la-numerisation-du-patrimoine-ecrit/Rapport-Tessier>.

during negotiations with Google: as compared with the first agreements to become public, the most recent seem to take better account of the issues identified, among others, by the High Level Expert Group on Digital Libraries and by the *Comité des Sages*: access and reuse by end-users and Europeana, exclusivity avoidance, and transparency. While indicating that public-private partnerships for digitisation must be encouraged, the *Comité* recommended that they must be transparent, non-exclusive and equitable for all partners, and must result in cross-border access to the digitised material for all. Preferential use of the digitised material granted to the private partner should not exceed seven years. In negotiating the most recent agreements, Google has indicated its willingness to make digital public-domain content available through Europeana. This took concrete shape in September 2010, when about 100 000 books scanned by Google from the Ghent University Library were made available through Europeana.

On a smaller scale, a few other private actors are reported as participants in digitisation projects with libraries in different European countries: this is the case with the US company Proquest, which has entered into partnerships for the digitisation of early books with the Bodleian Library of Oxford and the Royal Danish Library. In addition to private commercial partners, other US organisations, such as foundations (Bill and Melinda Gates Foundation in Latvia) and public agencies (e.g. USAID in Bulgaria, an interesting example although not a PPP) are currently financing small-scale digitisation projects, in particular in new Member States. More countries have reported digitisation partnerships, in particular in archives, with the Genealogical Society of Utah.

***Bulgaria** — Since November 2006, the regional library ‘Stoyan Chilingirov’ in Shumen has had a ‘Digital studio’ division, developed as part of a project, ‘Preservation of historical documents’, financed by the US Agency for International Development.*

Public loan schemes with the involvement of private partners to fund digitisation and generate an actual return on investment in the medium term are another solution, where a few but significant cases are reported:

***The Netherlands:** The Digital Facts survey showed that the private sector funds an average of 6% of the Netherlands’ entire digitisation budget. Libraries and museums seem to have more success in attracting external funding than archives.*

Images for the Future (audiovisual) works with a number of private partners through contracts for preserving and/or digitising parts of collections. One of the conditions for receiving public funding is the requirement to generate income through added-value user services for digitised content. Between 2014 and 2025 €64 million is to be generated and returned to the public purse. This type of public funding is experimental and is currently being evaluated.

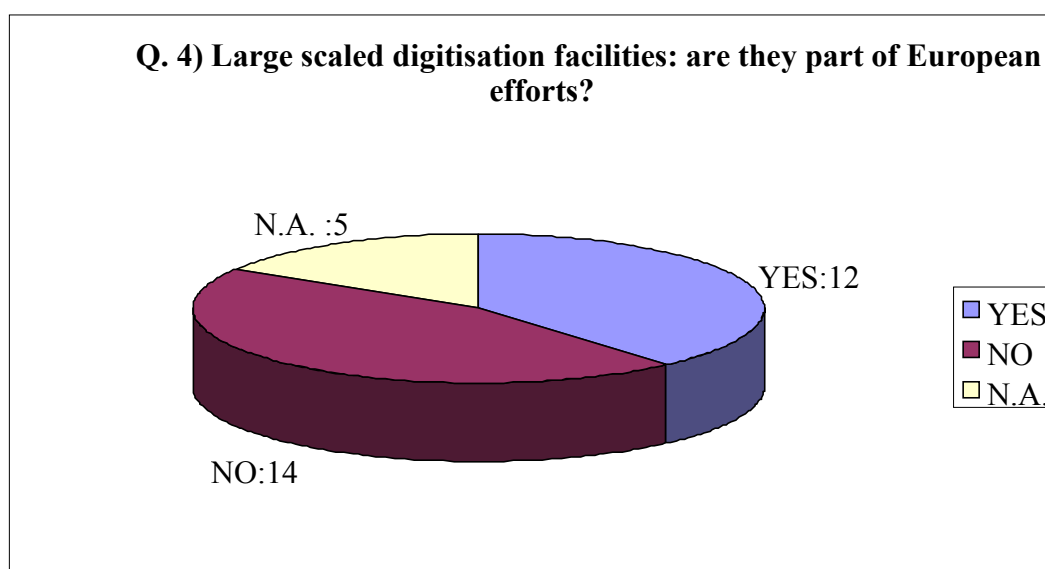
7. LARGE-SCALE DIGITISATION FACILITIES

7.1. Developments at EU level

Twelve countries state that their large-scale digitisation facilities form part of European networks and collaborative efforts. The European Commission has developed an approach to promote digitisation competence centres under the Seventh Framework Programme for Research and Technological Development. The IMPACT project brings together centres of competence in large-scale text digitisation with the focus on early printed text.

PRESTOPRIME is following on from PRESTOSPACE in the area of tools and services to support audiovisual archives in the digitisation of analogue content. The 3DCOFORM project includes a competence centre for the digitisation of cultural objects and artefacts for museums and archaeological sites. Three different types of cultural objects are thus covered: text, audiovisual and ‘physical’ artefacts. This cluster of EU-funded networks has been delivering positive results in terms of capacity building and pooling of efforts.

Building on the results of these centers of competence and the technologies they are developing will help to achieve greater efficiency and drive down digitisation costs.



7.2. Developments at national level

Under the fourth point of the Recommendation, large-scale digitisation facilities are to be set up and run as part of, or in close collaboration with, competence centres for digitisation in Europe. The rationale behind the establishment of large-scale digitisation facilities is to accelerate and standardise the digitisation process, to reduce its costs and to grant broad and fast access for smaller cultural institutions. Many of the countries have already created such entities as part of the structure of university, national or other major libraries (Austria, Finland, Germany, Lithuania, Netherlands, and Norway), or national archives (Germany, Hungary, Spain, and Sweden). Other countries tend to prefer outsourcing digitisation activities to private service providers through public procurement (France, Greece, Latvia, Romania, the Czech Republic, and Slovakia).

Slovakia: *the construction of the Slovak Digital Library in Vrútky, as a branch of the Slovak National Library, has been suspended by the Ministry of Culture, in line with the Ministry’s intention to outsource digitisation to a private company, for which a public procurement procedure was announced before approval of the relevant feasibility study for the Information Society Operational Programme (Structural Funds).*

The UK model has tended in general to move away from the development of large-scale mass-digitisation facilities and towards boutique digitisation and digitisation-on-demand either in-house or on a smaller scale with a local digitisation partner, such as an academic institution. Hence, the only large-scale facilities tend to be found in institutions such as the British Library, which have a commitment to ongoing mass digitisation, or in academic or publishing

institutions with a clear commercial case for maintaining local digitisation infrastructure. The UK also has a small but growing market for commercial digitisation service providers.

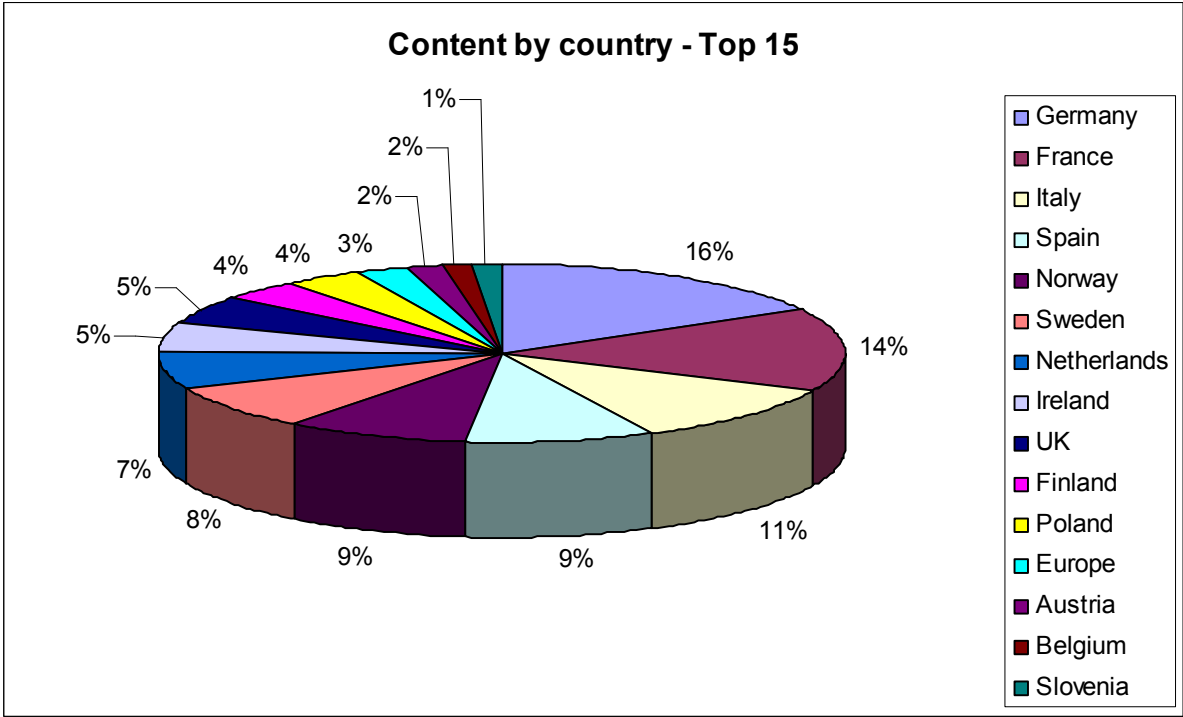
8. ONLINE ACCESSIBILITY: ACCESS TO CONTENT THROUGH EUROPEANA

8.1. Developments at EU level

Europeana, Europe’s digital library, archive and museum, was launched in November 2008 with 2 million digitised objects. The site has rapidly developed and now gives direct access to more than 19 million digitised books, maps, audio and video fragments from Europe’s cultural institutions. Work is ongoing to improve the functionalities of the site, including the multilingual aspects, and provide new ways of searching and displaying the content. Since the beginning of 2011, when Europeana content was indexed by several major search engines, user figures have gone up considerably.

There is still an imbalance in contributions from the Member States, although major progress has been made. At the launch in 2008, France contributed by far the largest number of objects (52%). It is now the second contributor with 17% of the total number of objects, after Germany (18%) and before Italy and Spain. Some of the smaller Member States still provide very few digitised objects. However, the use of this quantitative indicator needs to be qualified in that a digital object can be a single image (e.g. a photograph, or a digital reproduction of a museum object) or a more complex item, such as a book or a video. Therefore, the quantitative information provided in the following chart on country contributions does not imply any qualitative judgment.

Country contributions to Europeana in number of digital objects, only top 15 countries



Source: Europeana Office, 2011

Moreover, the audiovisual and audio sectors are currently not well represented, with only 2 % of the total number of objects, as against 32 % texts and 66 % images.

Table 4: Europeana content by type

Type	Total	Percentage
Total of records	19 160 726	
IMAGE	12710927	66 %
TEXT	6031196	31 %
VIDEO	272812	1 %
SOUND	145791	1 %

In order to improve this situation, and following a suggestion by the Council, the Commission set in motion a ‘Europeana content roadmap’ process in 2010: Member States are asked to identify gaps in the collections they have so far contributed to Europeana, and to define their plans to fill these gaps, including for the masterpieces. This process is managed by the Member States’ Expert Group on digitisation and digital preservation. The aim is to ensure that concrete plans are put in place across Europe with a detailed and year-by-year overview of what is being digitised and when it will be brought into Europeana. The exercise addresses both public domain works and works that are still in copyright.

Europeana has adopted a strategic plan for the period 2011-2015 with a focus on four strategic goals — *aggregate, facilitate, distribute and engage*.

*One example of the way Europeana is **engaging with users** is the WWI project. In this project European citizens can contribute objects and related stories from WWI. The objects are digitised and put in Europeana. The UK and Germany have been covered, and Europeana intends to expand the project to other countries. The result will be a large collection of objects and stories recollecting WWI in the run-up to the centenary of its start.*

*In order to **facilitate the innovative use** of its content, Europeana organised a series of ‘hackathons’ in March-June 2011. Europeana invited developers to experiment with the creation of applications, e.g. location-based applications for mobile phones on the basis of the digitised objects and the object descriptions available through the site.*

Since its inception phase, the Commission has contributed financially to the development of Europeana through project funding from the Competitiveness and Innovation programme. In the period 2011-2013 an average EUR 3.5 m a year is available for running and improving the Europeana platform. Member States and some individual cultural institutions provide the co-funding.

8.2. Developments at national level

The Recommendation invites Member States to promote Europeana, in particular by encouraging their cultural institutions and other private content and rights holders to make

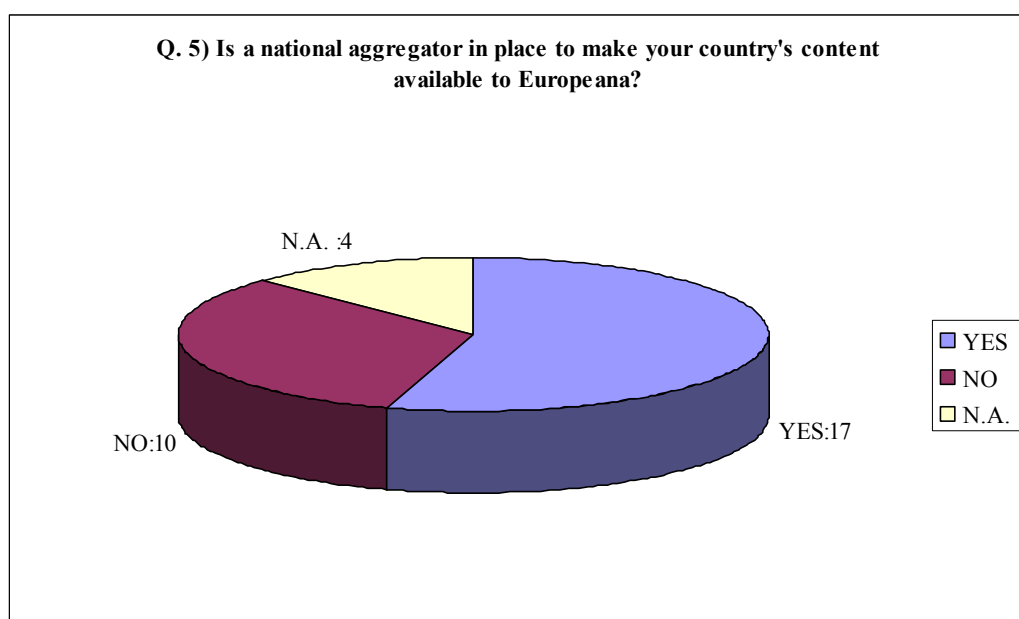
their digitised material searchable through the European digital library. How this has been done is reported above under 5.1.

The *Comité des Sages* has reinforced the Commission Recommendation, indicating that Europeana should become the central reference point for Europe's online cultural heritage. Member States must ensure that all material digitised with public funding is available on the site, and bring all their public domain masterpieces into Europeana by 2016. Cultural institutions, the European Commission and Member States should actively and widely promote Europeana.

Another question put to Member States in the questionnaire concerned the existence of national aggregators to consolidate national content from different sectors and to make it available for easy delivery and integrated access via Europeana.

More than half the national reports mention the existence or forthcoming introduction of national access portals, such as Kulturpool (Austria), Culturaitalia (Italy), Culture.fr (France), Culture Grid (United Kingdom), Gallica (France), Hispana (Spain), Letonica (Latvia), Czechiana (Czech Republic), Slovakiana (Slovakia), Deutsche Digitale Bibliothek (Germany), and Epaveldas (Lithuania).

There are signs of progress, as the number of national aggregators has increased since 2008.



9. ONLINE ACCESSIBILITY: ORPHAN AND OUT-OF-PRINT WORKS, PUBLIC DOMAIN WORKS

Point 6 of the Recommendation invites Member States to improve conditions for the digitisation of cultural material and for its online accessibility by:

- (a) creating mechanisms to facilitate the use of orphan works;
- (b) establishing or promoting mechanisms to facilitate the use of works that are out of print or out of distribution;
- (c) promoting the publication of lists of known orphan and public domain works,

(d) identifying barriers in national legislation to the online accessibility and subsequent use of cultural material in the public domain and taking steps to remove them.

9.1. Online accessibility: mechanisms for orphan works¹²

9.1.1. Developments at EU level

Proposal for a Directive on certain permitted uses of orphan works

In May 2011, the Commission tabled a proposal for a *Directive on certain permitted uses of orphan works*¹³, covering the reproduction and making available, by cultural institutions, of orphan works from their print and audiovisual collections. The proposal is part of a broader IPR package proposed by the Commission.

The adoption of the proposal was preceded by a series of actions and consultations with stakeholders on the issue of orphan works.

Work with stakeholders

The Commission has set up a High Level Group on Digital Libraries, which, together with its Subgroup on Copyright, has extensively debated and reported on the orphan works issue and suggested possible solutions to address it¹⁴. This work was further developed with a broader group of stakeholders from all sectors, including rights holders, cultural institutions and rights management organisations. The result was the signing of a *Memorandum of Understanding on Diligent Search Guidelines for Orphan Works* in June 2008¹⁵. The Reflection Group on Bringing Europe's Cultural Heritage Online (*Comité des Sages*) stressed in its 2011 report *A new Renaissance*¹⁶ the need for a legislative instrument, the main features it should have to effectively address the orphan works issue, and the need to avoid future orphans.

EU-funded projects

The Commission has co-funded projects such as *ARROW 'Accessible Registries of Rights Information and Orphan Works towards Europeana'* and its successor *ARROW+*, which brings together national libraries, publishers and collective management organisations with the aim of facilitating automated searches for rights and rights holders, rights clearance, and identification of orphan works at pan-European level.

Policy initiatives

¹² The following reports on the issue of orphan works in the EU provide further information:
Agnieszka Vetulani, *The Problem of Orphan Works in the EU — An overview of legislative solutions and main actions in this field*, European Commission (2008):

[http://ec.europa.eu/information_society/activities/digital_libraries/doc/reports_orphan/report_orphan_vetulani%20\(corrected%20version\)%20\(2\).pdf](http://ec.europa.eu/information_society/activities/digital_libraries/doc/reports_orphan/report_orphan_vetulani%20(corrected%20version)%20(2).pdf)

Anna Vuopala, *Assessment of the Orphan works issue and Costs for Rights Clearance*, European Commission (2010):

http://ec.europa.eu/information_society/activities/digital_libraries/doc/reports_orphan/anna_report.pdf.

¹³ http://ec.europa.eu/internal_market/copyright/docs/orphan-works/proposal_en.pdf.

¹⁴ http://ec.europa.eu/information_society/activities/digital_libraries/doc/hleg/reports/hlg_final_report09.pdf.

¹⁵ http://ec.europa.eu/information_society/activities/digital_libraries/doc/hleg/orphan/mou.pdf.

¹⁶ http://ec.europa.eu/information_society/activities/digital_libraries/doc/refgroup/final_report_cds.pdf.

Policy initiatives have been launched to analyse the need and possible options for further political action beyond the non-binding solutions mentioned above, such as the Green Paper on Copyright in the Knowledge Economy¹⁷, the Communication *Europe's cultural heritage at the click of a mouse*¹⁸, and the Communication on Copyright in the Knowledge Economy¹⁹. The 2010 Communication *'A Digital Agenda for Europe'*²⁰ announced a Directive on orphan works to create a legal framework to facilitate the digitisation and dissemination of cultural works in Europe under its *Key Action 1: 'Simplify copyright clearance, management and cross-border licensing'*.

9.1.2. *Developments at national level*

Four years after adoption of the Commission Recommendation, the majority of Member States do not have mechanisms making it easier for cultural institutions to digitise orphan works and make them accessible online.

Only four countries said they had such mechanisms: of these, only one, in Hungary, is already in force and specifically tailored for orphan works through an administrative authorisation system issuing a non-exclusive licence. It is not clear whether a mechanism already exists in national copyright law in Romania.

Denmark has a mechanism based on extended collective licensing which addresses the broader issue of mass-digitisation of works, including works in and out of commerce. The mechanism reported by the Czech Republic has similar features. Extended collective licensing systems are also used in Finland, Sweden and Norway. The Danish solutions, like other licensing mechanisms for mass digitisation, does not attempt to identify the orphan works contained in the body of works and diligent searches are not part of the licensing scheme, but if there are specific works which are orphan, the licence will also cover them.

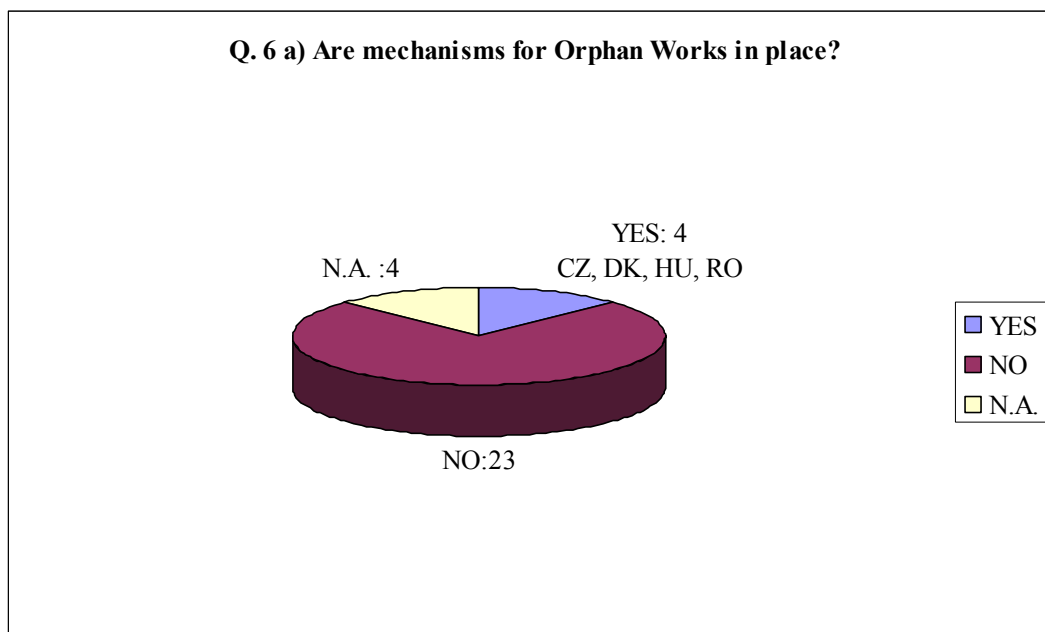
This means that a total of 7 countries possess some mechanisms that could be seen as dealing with orphan works. Nevertheless, according to some replies, extended collective licensing does not always allow cultural institutions to handle orphan works in a satisfactory way.

¹⁷ http://ec.europa.eu/internal_market/copyright/docs/copyright-info/greenpaper_en.pdf.

¹⁸ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0513:FIN:EN:PDF>.

¹⁹ http://ec.europa.eu/internal_market/copyright/docs/copyright-info/20091019_532_en.pdf.

²⁰ http://ec.europa.eu/information_society/digital-agenda/documents/digital-agenda-communication-en.pdf.



* This table is based on replies by Member States, see 9.1.2 for a complete analysis.

*The **Czech Republic** already has a system of extended collective licensing in place and is planning an amendment to national copyright law to improve the handling of all types of orphan works. However, there are concerns that such a mechanism is not particularly suited to mass digitisation.*

Many Member States have also remarked that a Europe-wide solution would be desirable, and stated that they would wait for the announced proposal for a Directive before taking action at national level.

United Kingdom: A proposed clause within the Digital Economy Bill (now the Digital Economy Act) would have provided for the use of orphan works, but was removed by the government. There continues to be no primary legislation (other than the limited provisions for fair dealing under the Copyright, Design and Patents Act) permitting the digitisation and accessibility of orphan works in public collections.

9.2. Online accessibility: mechanisms for out-of-print works

9.2.1. Developments at EU level

The following actions have been undertaken at EU level to implement mechanisms making it easier for cultural institutions to digitise out-of-print works and make them accessible online:

Work with stakeholders

The Commission has set up a High Level Group on Digital Libraries, which, together with its Subgroup on Copyright, has extensively debated and reported on the issue of digitisation and online accessibility of out-of-print works and possible solutions to address it, including model licensing agreements on out-of-print works with a view to facilitating the clearance of rights to these works for cultural institutions.

This work has been further developed in the Stakeholder Dialogue on Out-of-commerce works, facilitated by the Commission. The dialogue gathered rights holders, cultural institutions, rights management organisations and technology companies and agreed a

Memorandum of Understanding on Key Principles on the Digitisation and Making Available of Out-of-commerce Works, signed by the stakeholders in September 2011.

The *Comité des Sages* confirmed in its report *A new Renaissance* the need for solutions to digitise and make accessible online out-of-distribution works from all sectors (audiovisual, text, visual arts and sound), backed by legislation if rights holders and commercial providers do not manage to do this by themselves.

EU-funded projects

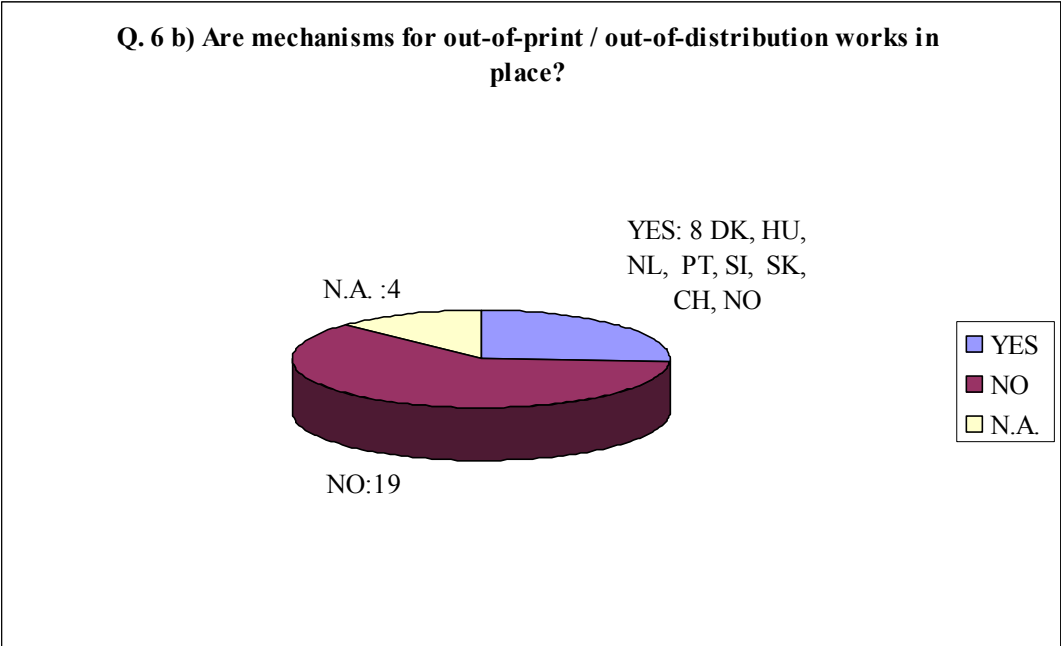
EU-funded projects such as *ARROW* and *ARROW +* have been launched to facilitate automated comprehensive searches for rights and rights holders and the clearance of rights to out-of-print works at pan-European level.

Policy initiatives

Policy initiatives have been launched to analyse the need and possible options for further political action, such as the Green Paper on Copyright in the Knowledge Economy, the Communication *Europe’s cultural heritage at the click of a mouse* and the Communication on Copyright in the Knowledge Economy. The 2010 Communication *A Digital Agenda for Europe* announced a dialogue with stakeholders with a view to creating a legal framework for out-of-print works, complemented by rights information databases, to facilitate the digitisation and dissemination of cultural works in Europe under its Key Action 1.

9.2.2. *Developments at national level*

Only a minority of countries (8) state they have mechanisms for out-of-print works. Again, they are based on extended collective licensing, voluntary agreements (such as in the Netherlands and Norway), or specific provisions in copyright legislation for preservation and on-site consultation (Austria, Slovenia).



Slovenia: *The Slovenian law on authors' rights and similar rights (Article 92) clearly defines out-of-print works (less than 5%, or less than 100 copies), and allows public institutions to reproduce such works only for their own needs and not for public use.*

Progress is evident in Article 20 of the Legal Deposit Act (Official Gazette 69/2006): if a publication has not been available on the market for at least two years, and if lost or damaged, a depositary organisation can reproduce one copy of the publication stored by some other depositary organisation to ensure preservation and accessibility and to allow its use on the premises of the organisation.

Austria: *Article 42, section 7, of the Austrian Copyright Law (Urheberrechtsgesetz) contains an exemption giving the right to reproduce out-of-print works and works published but not distributed in sufficient numbers, which allows these works to be reproduced by public institutions for non-commercial purposes. This enables the digitisation of these works, but not their online distribution. It allows on-site access only.*

9.3. Online accessibility: lists of orphan works and works in the public domain

9.3.1. Developments at EU level

The EU-funded ARROW project 'Accessible Registries of Rights Information and Orphan Works towards Europeana', and its successor ARROW +, are expected to contribute to finding ways of identifying rights and rights holders and clarifying the rights status of a work, including whether it is an orphan work or whether it is still in copyright or in the public domain.

Moreover, the recently tabled proposal for a Directive on orphan works contains a requirement that diligent searches be recorded, which will feed into lists of orphan works arising from unsuccessful searches.

9.3.2. Developments at national level

Only three countries (Germany, Hungary and Lithuania) indicate they have such lists or databases. However, many countries mention their involvement in the EU-funded ARROW project 'Accessible Registries of Rights Information and Orphan Works towards Europeana', involving national libraries, publishers and collective management organisations. ARROW is expected to contribute to finding ways of identifying rights and rights holders and clarifying the rights status of a work, including whether it is an orphan work or out of print.

Q. 6 c) Are lists / databases of Orphan and Public Domain Works in place?



Hungary: Article 8 of the Government Decree provides for a register of orphan works. It is to be kept by the Hungarian Patent Office, but will include only orphan works for which licences have been granted for their use. It will be a publicly available administrative register that can be consulted by anyone. It is to be electronically accessible (online).

9.4. Online accessibility: barriers to the accessibility and use of public domain works

9.4.1. Developments at EU level

The Commission Communication *Europe's cultural heritage at the click of a mouse* (see footnote 6) stressed the importance of keeping public domain works accessible after a format shift, or, in other words, works in the public domain should stay there once digitised and be accessible through the internet. This idea was reiterated in the Communication *Europeana — next steps*²¹, which highlighted the role of public domain material as an important source of re-use by citizens and companies alike and a driver of competitiveness in the internet age. Digitised public domain material should be turned into a permanent asset for the information society, in line with the EU policy on the re-use of public sector information as well as the *OECD Ministerial Recommendation on Enhanced Access and More Effective Use of Public Sector Information*²².

The Council endorsed this view in its *Conclusions on Europeana: next steps*²³. For the further development of Europeana, it considered that the number of objects from libraries, museums, archives and audiovisual collections accessible through the portal should be increased, and joint work should be continued to ensure the wide availability of public domain works after their digitisation.

²¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0440:FIN:EN:PDF>.

²² Seoul, 18 June 2008.

²³ <http://register.consilium.europa.eu/pdf/en/10/st08/st08843.en10.pdf>.

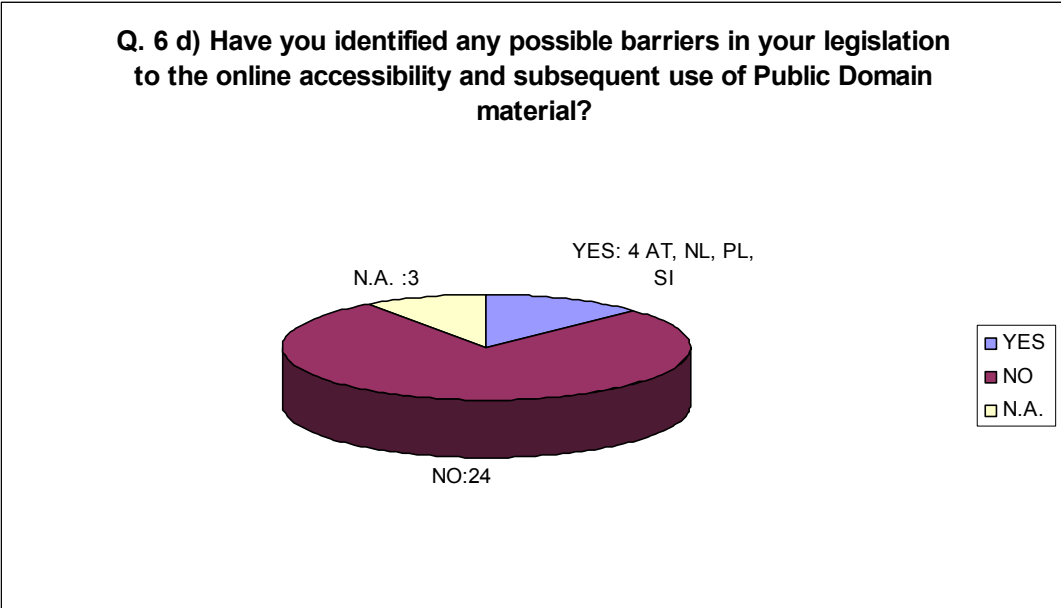
The European Parliament in its *Resolution Europeana — the next steps*²⁴ also expressed the view that public domain content in the analogue world should remain in the public domain in the digital environment even after the format shift. It recalled that digitisation activities should not lead to the appearance of ‘new rights’ derived from the digitisation process, such as, for example, an obligation to pay for the re-use of works in the public domain. The European Parliament Resolution also calls on those European cultural institutions which digitise their public domain works to make them available via Europeana and not to restrict availability to their own countries.

A study into the economic and social value of the public domain has provided a first insight into the size, evolution and value of the public domain, also taking into account voluntary sharing schemes²⁵.

9.4.2. *Developments at national level*

The Recommendation invites Member States to identify barriers in their legislation to the online accessibility and subsequent use of cultural material that is in the public domain, and to take steps to remove them.

Only four countries indicate that they have identified legal barriers to the accessibility and use of public domain material.



The types of legal barriers mentioned include: copyright and neighbouring rights’ legislation; personal data protection legislation; and legislation concerning databases. The complex issue of creating a new layer of rights through the digitisation of public domain works is also mentioned. In general, the replies indicate that the protection of public domain works in the digital environment is an issue requiring better understanding and further attention.

²⁴ http://ec.europa.eu/information_society/activities/digital_libraries/doc/parliament/resolution_europeana.pdf.

²⁵ http://ec.europa.eu/information_society/activities/digital_libraries/doc/public_tenders/public_domain_study/executivesummary.pdf.

10. DIGITAL PRESERVATION

The long-term preservation of digital assets is one of the fundamental challenges that the ICT world is facing. Some solutions already exist but further developments are necessary to ensure that our digital collections and data, regardless of their format, will remain available for all future generations.

10.1. Developments at EU level

For more than 10 years, the European Commission has been funding research projects to provide libraries, national archives and industry with cost-effective systems for secure preservation of our digital data.

Since the beginning of Framework Programme 7, more than EUR 60 million has been spent on 12 research projects to ensure future access to our digital information. During Framework Programme 6, seven projects had already paved the way. Two of them (PLANETS, PRESTOPRIME) have established organisations to provide advice and solutions within their communities:

- (1) The Open Planets Foundation (OPF) provides its members with practical solutions and expertise in digital preservation, building on the research and development outputs of the PLANETS project. The OPF's mission is to ensure that its members around the world can meet their digital preservation challenges with solutions that are widely adopted and actively practised by national heritage organisations and others.
- (2) PrestoCentre is a membership-driven organisation that helps custodians and creators of audiovisual content to make the most of their digital archives through advocacy, information creation, knowledge leveraging, and practical workshops. PrestoCentre works with experts, advocates, businesses, public services, educational organisations and professional associations to enhance the audiovisual sector's ability to provide long-term access to cultural heritage.

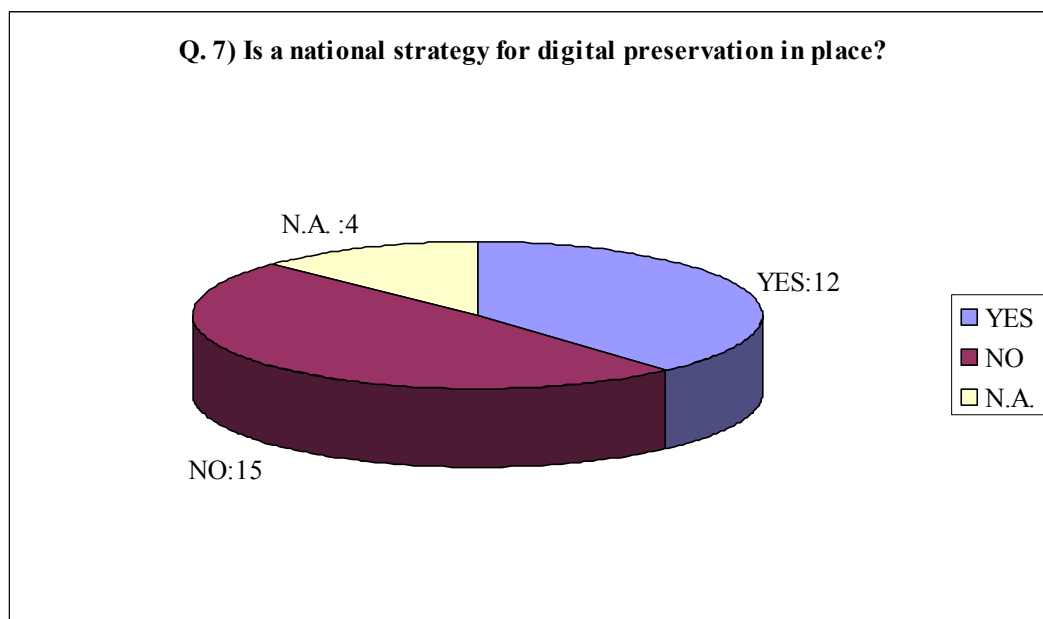
The *Comité des Sages* has also issued a series of recommendations on the issue of digital preservation. It suggests, among other things, that in order to guarantee the long-term availability of digital collections, Europeana — in the medium term — could also play a role in their preservation. In addition, a system should be developed so that any cultural material that currently needs to be deposited in several countries is only deposited once.

10.2. Digital preservation: national strategies and plans

The Recommendation asks Member States to establish national strategies for the long-term preservation of digital material, indicating the organisational approach, roles, responsibilities, resources, plans and objectives.

The situation remains substantially unchanged from the previous report: digital information is threatened by deterioration of the medium carrying it, or by the obsolescence of the technology on which it depends. There is a growing recognition by Member States of the cost of losing digital data, and almost half have already adopted a strategy for digital preservation. These national strategies are quite diverse, ranging from a preliminary feasibility study to a much more advanced and comprehensive digital preservation infrastructure, with processes already up and running. These countries are gradually, albeit slowly, developing their national

preservation policies, mainly with their national libraries or national archives as focal organisations.



In Poland, the Committee for Digitisation published in 2009 a programme for the digitisation of cultural goods and collections and for the storage and availability of digital items in Poland (2009-2020).

Poland: *The programme provides a framework for the cooperation of all institutions responsible for cultural heritage and consists of recommendations concerning common criteria for the selection of material and technical standards for scanning and processing material, metadata, online access, and long-term preservation.*

The Netherlands: *in 2008 the Netherlands Coalition for Digital Preservation (NCDD) was established with the specific aim of building a national infrastructure for digital preservation. In 2009, to underpin its strategy, the NCDD carried out a national digital preservation survey, funded by the Ministry of Education, Culture and Science. The resulting report, 'A future for our digital memory', identified major gaps in the long-term management of digital information resources and concluded that efforts to improve collaboration between stakeholders within information chains should be prioritised to secure the type of cradle-to-grave care digital data require. In response, the NCDD is developing a strategy whereby four prime-mover organisations will identify and implement infrastructure measures within their sectors. These are: the Royal Library — KB (scholarly publications), the National Archives (public records), Data Archiving and Networked Services (research data), and the Netherlands Institute for Sound and Vision (audiovisual and dynamic content). A prime mover has yet to be assigned for the cultural heritage sector (museums). The NCDD itself will concentrate its efforts on knowledge sharing between sectors.*

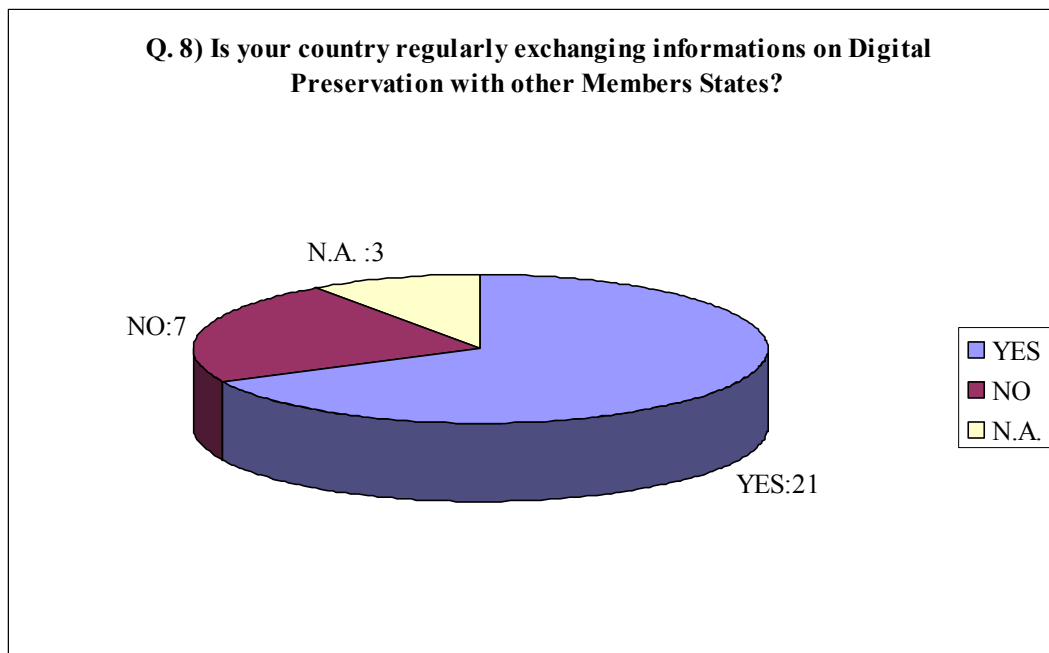
In France, *the national archive has put in place a new digital preservation platform, PILAE, to run from 2008 until 2012. Based on the OAIS standard, the platform will handle the storage and preservation of born-digital documents produced by the national central service and provide access to them.*

Austria: The Österreichisches Staatsarchiv (Austrian State Archives) is currently implementing a long-term preservation project. This project is being carried out in cooperation between the Austrian Federal Chancellery, Siemens IT Solutions and Services and Tessella plc (an international technology and consultancy firm for software science and engineering). The project includes the conception and implementation of a software solution for the long-term digital preservation of administration information. It is to be developed by Siemens IT Solutions and Services and Tessella plc and will be hosted at the BRZ (Austrian Federal Computing Centre). The project is based on an interesting scalable business model.

11. DIGITAL PRESERVATION: EXCHANGE OF INFORMATION AT EUROPEAN LEVEL

Under the Recommendation, Member States are also to exchange information on their digital preservation strategies and action plans.

Most countries (21) indicate that they do this. EU research projects, in particular those co-funded under the Sixth and Seventh R&D Programmes, are often mentioned by Member States as platforms for exchanging information and experience at European level. Projects such as PLANETS, CASPAR, KEEP, and DPE have brought together experts and practitioners in digital preservation from museums, archives, national libraries and research institutions all over Europe. Also, the Conference of European National Librarians (CENL), Europeana and Europeana-related projects (such as the Archives Portal Europe — APEnet) are often mentioned as important platforms for the exchange of information on digital preservation policies and practices.

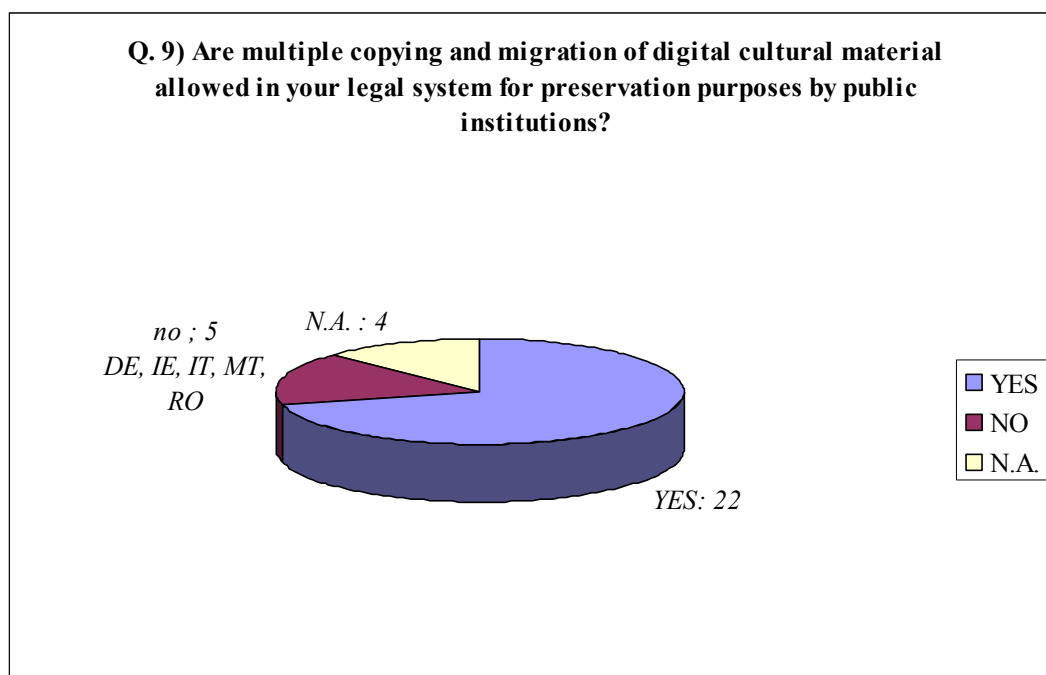


12. DIGITAL PRESERVATION: MULTIPLE COPYING AND MIGRATION FOR PRESERVATION PURPOSES

In the Recommendation, Member States are invited to provide in their legislation for multiple copying and migration of digital cultural material by public institutions for preservation

purposes, while fully respecting EU and international legislation on intellectual property rights.

This point in the Recommendation has a good implementation record, as 22 countries state they have put it into practice. However, in Member States where multiple copying and migration for preservation purposes is not so far allowed, this is considered a problematic issue. Also, several Member States make no explicit provision for multiple copying and migration for preservation purposes. This situation could lead to legal uncertainty about what is exactly allowed and what is not.

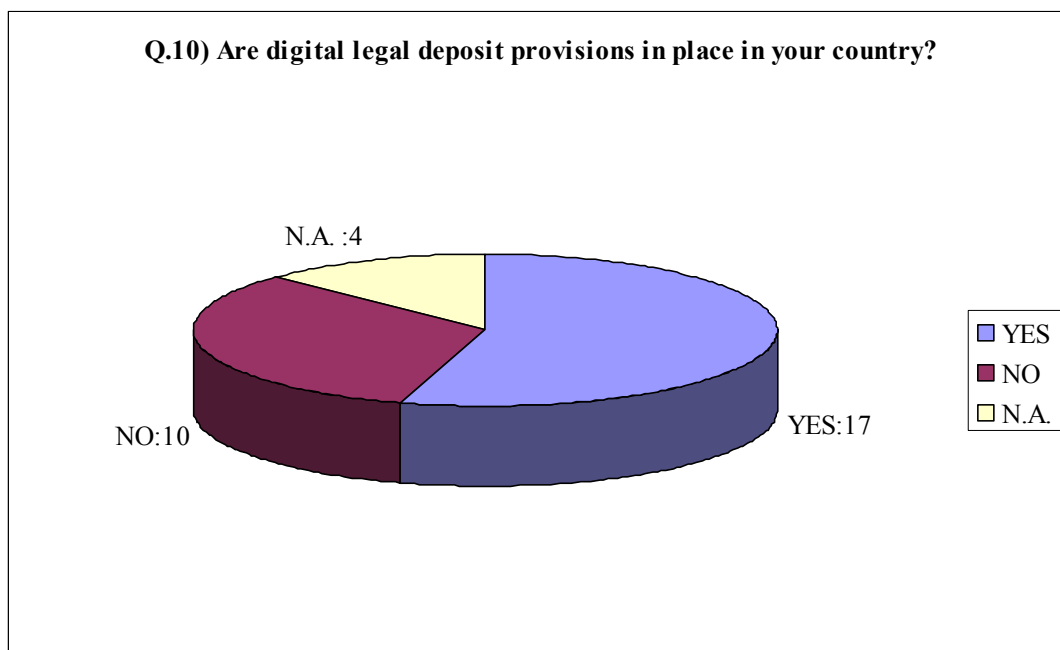


13. DIGITAL PRESERVATION: DIGITAL LEGAL DEPOSIT

Member States were invited to establish policies and procedures for the deposit of material originally created in digital format ('Digital Legal Deposit'), taking into account developments in other EU countries to prevent a wide divergence in depositing arrangements.

Most Member States have legal deposit policies in place for born-digital material. The number has increased since 2008, and is expected to increase further as some countries have legislation in preparation. However, certain countries that already have legislation in place are reporting that actual implementation of the digital legal deposit scheme has not yet started, or has just started, so the number of deposited items is very small.

Moreover, the deposit arrangements and types of material covered vary considerably. For example, audiovisual and cinematographic material is currently excluded in Austria and Belgium. Some issues have arisen around the deposited digital material, e.g. the deposit of encrypted material or limitations on what can be done with the preservation copy (e.g. on-site access, or sharing the copies with other deposit libraries that are legally entitled to receive the material).



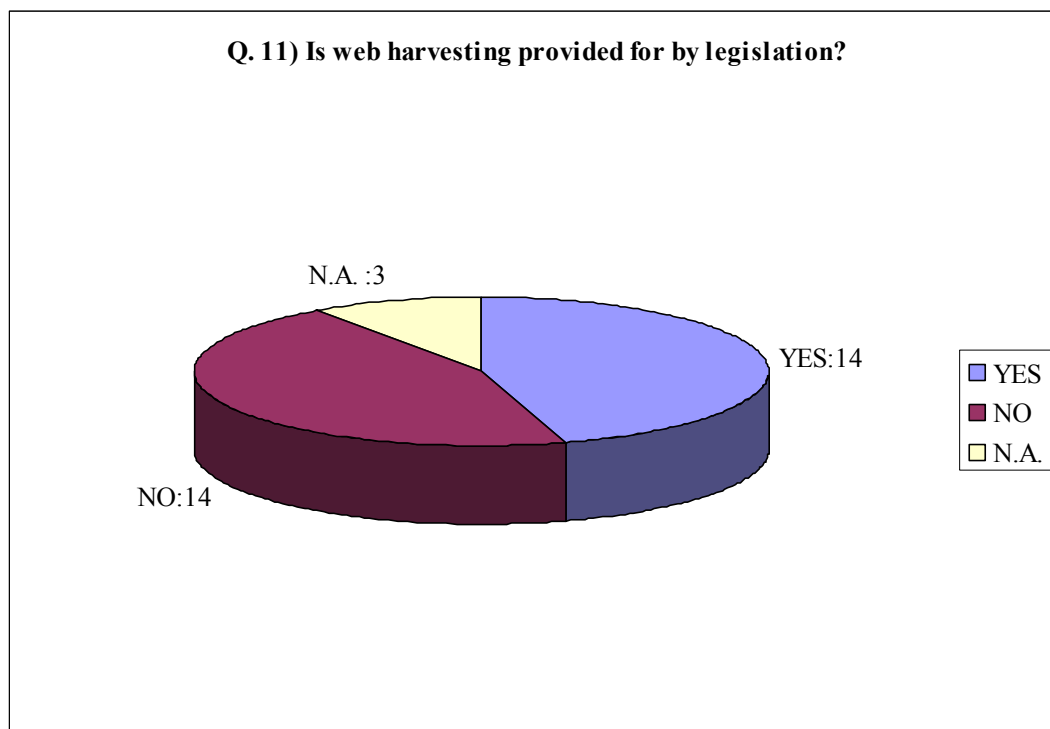
***Austria:** The new Austrian Media Law came into force in March 2009, with a new amendment on online publications, which forms the legal basis for web archiving and governs the collection of online publications. It covers all types of material except objects that consist mainly of audio or video files. Before the new Media Law, the Österreichische Nationalbibliothek had voluntary agreements with publishing houses and non-profit organisations. The collected online publications currently number 6480 objects, comprising approximately 48 750 files (approx. 400 GB disk space)*

14. DIGITAL PRESERVATION: WEB HARVESTING

Point 11 of the Recommendation invites EU member States to provide in their legislation for the preservation of web content by mandated institutions using techniques for collecting material from the internet such as web harvesting.

14 countries replied that their legislation already provides for web harvesting, normally as part of digital legal deposit arrangements. Here too, the actual nature (scope, depth, frequency) of harvesting varies widely. Moreover, access policy regarding the harvested material is also rather diverse, normally due to personal data and copyright protection concerns: many countries (e.g. Spain, France and the Czech Republic) report that access to harvested material is possible exclusively within library premises. Examples of full online access to archived websites of public institutions are reported by Germany, while in Slovenia access is currently possible only on-site for library staff.

Q. 11) Is web harvesting provided for by legislation?



Slovenia: The new Legal Deposit Act also regulates the preservation of web content. The institution responsible is the National and University Library. At present, the number of publications stored is low because work since 2007 has mainly focused on the preparation of rules, establishing the infrastructure for loading web-based publications, and prototype capturing of case internet domains. The websites harvested are those of government, higher education institutions, research institutions, other public sector institutions, and other miscellaneous sites in accordance with the criteria defined by the 'Regulations on type and selection criteria for legal deposit of electronic publications'. Access regime: the web archive is currently accessible to National Library employees only, but will be publicly accessible (as defined in the Legal Deposit Act) when a substantial amount of material is harvested.