Cultural heritage
Digitisation, online accessibility and digital preservation

REPORT on the Implementation of Commission Recommendation 2011/711/EU
2011-2013

Cover image: Raphael's ‘The School of Athens’ fresco. Source: Wikiart.org
Implementation of Commission Recommendation on the digitisation and online accessibility of cultural material and digital preservation

Progress report 2011-2013

Working document

September 2014
This report reviews and assesses the overall progress achieved in the European Union in implementing Commission Recommendation of 27 October 2011 on the digitisation and online accessibility of cultural material and digital preservation (2011/711/EU), as well as the related Council Conclusions of 10 May 2012. The Commission had presented a first report in 2008, with its Communication 'Europe's cultural heritage at the click of a mouse' (COM/2008/0513) and a second report in 2010, both regarding implementation of the Commission Recommendation 2006/585/EC on the same topic.

In 2011, the Commission recommended to the Member States an updated set of measures for digitising and bringing cultural heritage online, and for digital preservation, in order to ensure that Europe maintains its place as a leading international player in the field of culture and creative content and uses its wealth of cultural material in the best possible way. Such measures include further planning and monitoring of digitisation actions, setting clear quantitative targets, expanding funding and re-use conditions through public-private partnerships and structural funds, pooling digitisation efforts, improving access to digitised public domain material as well as conditions underpinning large-scale digitisation, cross-border accessibility of out-of-commerce works and long-term preservation of digital cultural material and web-content.

The Recommendation covers the 28 EU Member States as well as the 3 non-EU European Economic Area countries (Norway, Iceland, Liechtenstein) and Switzerland, a total of 32 countries. This report is based on the first set of national reports submitted late 2013, early 2014 on the implementation of Recommendation 2011/711/EU, which calls on Member States to inform the Commission 24 months from its publication, and every 2 years thereafter, of action taken in response to it. All reports received (25 reports at the time of writing) are available online on the following Commission's dedicated website:


While these national reports are the main source of the information obtained, this overall assessment also makes use of the findings of the ENUMERATE survey, funded by the Commission to measure progress in digitisation, as well as other sources at national and EU level, such as the Collections Trust survey on the cost of digitising Europe’s heritage. It combines a quantitative overview of the situation in all countries with more qualitative assessments based on examples from national reports (in italics).

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.

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2 OJ L 283, 29.10.2011, p. 39
3 OJ C 169, 15.6.2012, p. 5
6 OJ L 236, 31.8.2006, p. 28
EXECUTIVE SUMMARY

Digital technologies and the internet bring unprecedented opportunities to access cultural material for leisure, study or work, reaching out to broader audiences, engaging in new user experiences and reusing it to develop learning and educational content, documentaries, tourism applications, games and other innovative products and services.

The Commission Recommendation on Digitisation and online accessibility and digital preservation of cultural material (2011/711/EU) asked Member States to step up their efforts, pool their resources and involve the private sector in digitising cultural material, in order to increase online accessibility of European cultural heritage. The digitised material should be made more widely available through Europeana, Europe’s digital library, archive and museum.

As recognized by the Council in its conclusions of 10 May 2012 on the Recommendation, digitised cultural material is an important resource for European cultural and creative industries, which account for ca. 4% of EU’s GDP and jobs. It contributes to economic growth and job creation and to the achievement of the digital single market through the increasing offer of new and innovative online products and services.

This first report on the implementation of Recommendation 711/2011/EU during the 2011-2013 period shows that certain progress has been made in these two past years in spite of the economic crisis and cuts to cultural institutions’ budgets. However, digitisation remains a challenge, with only a small fraction of the collections digitised so far (estimated at ca. 12% on average for libraries by the Enumerate survey and less than 3% for films). Additional effort is needed on digitisation of Europe’s cultural heritage.

Member States have evidenced imaginative ways to find additional funding schemes, including crowd-funding, tax-breaks, lottery funds, public loans or dedicated tax shares in support of digitisation, a positive move in view of the daunting costs involved in digitising Europe’s rich heritage.

Some countries have also reported new ways to attract private funding for digitization, through public-private partnerships of various kinds, notably in the UK and The Netherlands, though not always in full compliance with the conditions set out in the Recommendation, notably on the transparency and duration of the agreements. However, public-private partnerships are not yet widely developed and digitisation still relies for the most part on public funds.

To maximize digitisation capacity, structural funds provide an opportunity to co-fund digitisation, particularly in this challenging budgetary period. A number of countries such as Baltic and Scandinavian countries, Austria, Czech Republic, Germany, Greece, Italy, Malta, Poland, Slovakia and Slovenia have reported interesting initiatives in this area, but use of structural funds for digitisation remains scarce and unevenly spread across the EU.

The national reports provide some interesting examples of how cultural institutions promote new ways of expanding access to, and re-use of cultural heritage through the use of digital platforms, social media or other ICT tools. For this, it is essential to ensure wide availability of the digitised materials in open platforms, with appropriate quality,
resolution and interoperability features. However, such initiatives remain for the most part scattered and limited in reach and scope.

Digitised public domain material is an area of concern. Frequently, accessibility to these resources is jeopardized by intrusive watermarking, low resolution or visual protection measures, and its re-use limited by the prohibition of reproduction or use of such materials for other than non-commercial purposes (e.g. on grounds of cultural heritage protection rules). Though the Recommendation encourages the widest possible use and re-use of digitised public domain material, this part of the Recommendation has not always been well addressed. There are however a few examples that show the way forward: Institutions like the Rijksmuseum have widely opened up for free re-use their digitised public domain material in high resolution format. Notwithstanding such initiatives, contractual or statutory constraints remain in the way of this Recommendation objective.

The orphan works Directive, adopted in 2012, will help in digitising and bringing cultural content online, particularly important for certain types of old in-copyright works such as film or audio visual heritage. Its effects will however only be felt after the transposition deadline in October 2014. Legal backing of licensing solutions for the large-scale digitisation and cross-border accessibility of out-of-commerce works, called upon by the Recommendation, remains an exception rather than the rule. However, encouraging progress was noticed in a number of countries, such as the legally-backed collective licensing solutions for wide-scale digitization of out-of-commerce books launched in France and Germany.

Europeana reached its overall collection target set out in the Recommendation ahead of the 2015 deadline (30 million objects), but copyrighted material, as well as audiovisual material, remains under-represented in the cultural portal, partially due to the complexity and costs involved in clearing rights for the digitisation and online accessibility of those materials. Also premium content from mainstream cultural institutions (including masterpieces of leading European museums) is not always present.

A few countries are already implementing comprehensive digital and long-term preservation strategies, by establishing the necessary digital infrastructure, standards and protocols, together with the required legal deposit arrangements and provisions to enable collection of those materials such as web-harvesting. However, this is an area where implementation of the recommendation still requires further efforts, if we want our digital heritage to be properly preserved for future generations.

The Recommendation has proved the relevance of the topics covered, which has only increased in these times of financial crisis and budgetary cuts. The resilience of the cultural and creative sectors, which grew faster than the rest of the economy over the period, confirms the pertinence and timeliness of the Commission recommendations in this area, though further efforts are needed to meet them.
1. DIGITISATION: ORGANISATION AND FUNDING

Most Member States reported digitisation strategies, plans or schemes to set and/or monitor digitisation targets, though this is often done at cultural institution or local/regional level or limited to specific sector(s). However, these plans seldom give a comprehensive, cross-sector picture of digitisation activities carried out or planned country-wise. Digitisation data overviews are occasionally available at national level (e.g. CZ, DK, ES, FI, FR, LT, NL, SE), and annual monitoring is in place only in few cases (CZ, DK, ES, FR, LT, NL). The ENUMERATE initiative is leading the way with European-wide digitisation data, provided on the institutions level.

Good examples of setting qualitative targets were reported, including compliance with technical requirements as well as criteria for the selection of material to be digitized. However, such quality targets need to be more widely established in the Member States.

Concerning budgets allocated for digitisation, national strategies are often tied to the use of Structural Funds. Other reported national budget sources were income tax (IT) or lottery revenues (UK). There is an increasing number of public-private-partnerships (PPPs), mostly with Google and ProQuest, but also sponsorships, donations and crowd-based funding schemes. Some Member States report PPPs to be a good practice for digitization (e.g. NL, UK). Others report that on a smaller scale, for example, for smaller institutions or smaller linguistic areas, this has not been a successful scheme. The use of structural funds to co-fund digitisation was reported by a sizeable number of countries, and this is expected to increase in the multiannual financial framework for 2014-2020.

Pooling of digitisation efforts through national competence centres is reported as an established or emerging practice in several Member States. Cross-border collaboration is achieved thanks in particular to EU projects for the development of competence centers/networks and cross-border aggregators for Europeana.

1.1. Planning and monitoring digitisation

Point 1 of the Recommendation invites Member States to further develop their planning and monitoring of the digitisation of books, journals, newspapers, photographs, museum objects, archival documents, sound and audiovisual material, monuments and archaeological sites (hereinafter 'cultural material') by:

(a) setting clear quantitative targets for the digitisation of cultural material, in line with the overall targets mentioned under point 7, indicating the expected increase in digitised material which could form part of Europeana, and the budgets allocated by public authorities;

(b) creating overviews of digitised cultural material and contributing to collaborative efforts to establish an overview at European level with comparable figures;
1.1.1. Schemes, quantitative targets and allocated budgets

Member States report different ways of organising their planning and monitoring of digitisation.

Schemes range from overarching national strategies and frameworks (CZ, DK, EE, LV, LT, SI, SE), national funding programmes (GR, PL, SK), domain-specific national initiatives by Ministries -for the institutions under their responsibility (ES, IT)- or by major institutions (HU), regional schemes (BE), to individual digitisation strategies of institutions (FI, NL, LU, PT). In some cases (AT, UK, DE) it is a combination of more than one of the above.

Depending on each scheme, as described above, quantitative targets (and respective monitoring) are set at national, regional, programmatic or institutional level accordingly.

It is also often reported (e.g. NL, DE, UK) that there is strong digitisation activity by cultural institutions even though there may not be an overarching national strategy or comprehensive quantitative targets. On the other hand, the Netherlands, Germany and France report that they have already begun work towards an overall coordination and digitisation plan.

Concerning budgets allocated for digitisation, national strategies are often tied to the use of Structural Funds (CZ, EE, LV, LT, PL, SI). Other reported examples of national funding sources for digitisation, besides institutional budgets, include the '8 per 1000' scheme in Italy (8‰ of IRPEF tax) and the ‘Heritage Lottery Fund’ framework in the UK.

An overview of the various schemes described in the progress reports is provided below.

Q. 1.1 Schemes to plan, coordinate and monitor, quantitative targets and allocated budgets?

National strategies and frameworks

Czech Republic: A scheme of the planning and coordination of the digitisation of cultural material is part of the “Cultural Content Digitisation Strategy for 2013 – 2020” and is being gradually applied. A special working group will be in place to coordinate all relevant efforts at the level of the Ministry of Culture. It will be able to continuously monitor information about the progress of digitisation and, on the basis of generally accepted criteria, also information about the volume of the content already digitised. The National Digital Library (NDK) Project, funded from the EU Integrated Operational Programme and co-financed from the budget of the Ministry of Culture, commenced in 2012. The purpose is to digitise 100,680 volumes (10.65% of the national printed production [as at the initial year of the project]) by the end of 2014, and 120,000 volumes (26,000,000 pages) by 2015.

Denmark: A framework was set with the National Report on the Digitisation of Cultural Heritage in 2009, which can no longer be considered fully up to date. The Ministry’s forum on digitisation is planning to evaluate this framework and respective quantitative and qualitative targets.

Estonia: To co-ordinate digitisation and digital preservation of cultural heritage in Estonia and monitor progress in digitisation, the Council for Digital Preservation of Cultural Heritage was affiliated to the Ministry of Culture of Estonia. The Council is made up of representatives of various memory institutions. In 2011, the new development plan for digitisation (third of its kind) entered into force, with stepping up digitisation as one of the key subjects. Memory
institutions present their digitisation plans to the Council for Digital Preservation of Cultural Heritage. The plans for the period of 2014-2018 will be specified in 2014. The goal in Estonia is to digitise all important cultural heritage objects by 2018.

Latvia: In 2012 – 2013 the Ministry of Culture together with experts developed new State Culture Policy Guidelines 2014-2020 “Creative Latvia”. The Digital Cultural Heritage Development Strategy is one out of 15 sectorial strategies elaborated and integrated as part of the new cultural policy document. The State Culture Policy Guidelines 2014-2020 is to be approved by the government in 2014. At the moment each cultural institution set own quantitative targets. National targets / performance indicators are to be set in the Digital Cultural Heritage Development Strategy. This work is underway.

Lithuania: In 2011-2013, the processes of digitisation of cultural heritage in Lithuania were carried out in accordance with the Strategy for the Digitisation of Lithuanian Cultural Heritage, Preservation of and Access to Digital Content approved by the Government of the Republic of Lithuania in 2009 and a plan of its implementing measures for 2009-2013. These documents set out the most general targets for the implementation of the digitisation policy, such as the increase in the number of cultural heritage objects digitised at memory institutions and online accessibility of digitised Lithuanian cultural heritage. The number of objects digitised at Lithuanian memory institutions doubled from 280,000 to 557,000 in 2011-2013. At present, a new planning document for the Lithuanian Cultural Heritage Digitisation Policy is being drawn up that will lay down the objectives and targets for a new period.

Slovenia: Basic indicators, means and measures for digitisation of cultural material are defined in The National Program for Culture (2014-2017) – the most important strategic document of Slovenian cultural policy. The Government of the Republic of Slovenia has adopted it at the end of September 2013. It is in the parliamentary procedure at the moment. The final goal of this effort is the same as the overall targets of the Recommendation of 27 October 2011 on the digitisation and online accessibility of cultural material and digital preservation.

Sweden: A national strategy for digitisation, digital access and digital preservation was established by the Swedish Government on 21 December 2011. A secretariat, Digisam, for the coordination of digitisation, on line access and digital preservation for all state cultural heritage institutions was set up in the National Archives. Sweden has so far not set up any quantitative targets.

National funding programmes

Poland: In the years 2011-2015, Poland is implementing the Multiannual Programme Culture+ adopted by the Council of Ministers as a long-term government programme for the years 2011-2015 (Resolution of the Council of Ministers No. 176/2010 of 12 October 2010 as amended). The programme has two priorities: “Library+ Infrastructure of Libraries” and ‘Digitisation’. The budget of the ‘Digitisation’ priority (state budget funds) for the years 2011-2015 amounts to PLN 120 million (approx. 29 million euros), including more than PLN 40 million earmarked to finance the Competence Centres. The Competence Centres, as the institutions subordinate to the Ministry of Culture and National Heritage, define in their respective fields the quality objectives for digitisation of cultural heritage and prepare adequate standards for Polish cultural heritage digitisation. In addition to the Multi-Annual Programme Culture+, which is addressed to state and local cultural institutions and state archives, since 2007 the Ministry of Culture and National Heritage and its subordinated institutions promote the digitisation of Polish cultural heritage under digitisation funding projects (including the Programme of the National Audiovisual Institute “Digital Heritage”, Programme of the National Institute of Museology and Collections Protection “Cultural Heritage – Priority: Protection and digitisation of cultural heritage”), supporting digitisation
activities of non-governmental organizations as well as churches and religious associations and public universities.

**Greece:** Digitisation of cultural material is planned under the National Programme for Digital Convergence 2007-2013 (financed with Structural Funds). Many projects (with funding ranging from 200 to 300 KEuro) for digitisation and annotation of the cultural heritage are being implemented by small, medium or larger cultural organisations, museums, archives, institutions, all over Greece. The target of the Programme, regarding the amount of digital cultural content to be generated until 2016, if achieved, goes beyond the target for Greece set up under point 7 on Europeana.

**Domain-specific initiatives, by Ministries or by major institutions**

**Hungary:** Digitisation of cultural materials by public collections is carried out in a coordinated manner, with the various types of institutions (libraries, museums, audio-visual archives, archives) coordinating their related activities. There is no national digitisation strategy covering all sectors. The aim is to make all state and local public collections digitally available on a central interface and to upload content to Europeana.

**Italy:** The digitisation activities of the Italian libraries depending on the Ministry of Cultural Heritage, Activities and Tourism (MiBACT) plan the digitisation activities on the basis of the yearly budget and special funding.

**Spain:** Concerning libraries, the Ministry of Education, Culture and Sport publishes an annual call for funding digitisation projects. A target of 500,000 digital objects was set for libraries and has been fulfilled. From 2011 to 2013 (as of Oct. 31) 561,513 digital objects coming from all kinds of libraries have been digitised and are part of Europeana, as, according to calls for funding, materials digitised with public funds should contribute to Europeana.


**Malta:** Coordination between different initiatives is loose and flexible, based on the priorities, funding and other resources available at the implementation end. The key stakeholders in this effort are the Superintendence for Cultural Heritage, Heritage Malta, the National Archives of Malta and Malta Libraries.

**Luxembourg:** There is no national planning or monitoring scheme. In practice, the major cultural heritage organisations are executing their own schemes and securing the budgets individually. Organisation specific targets depend also on annual funding.

**Portugal:** Quantitative targets are not set at national level, but by each organisation.

**Work towards an overarching scheme**

**Germany:** Although various political and cultural parties have drawn attention to the necessity of a coordinated approach to the digitisation of Germany’s cultural heritage, as yet there is no overall master plan. However, several initiatives to coordinate digitisation projects at the federal state level, at the level of the Länder and/or domain level do exist. It has been suggested that the Deutsche Digitale Bibliothek, the national aggregator for Europeana, take on a bigger role in the overall coordinating and monitoring of the digitisation of cultural heritage – workshop in November 2013 which will bring together the DDB and representatives of all sectors and federal states, as a starting point towards a national digitisation scheme. No quantitative or qualitative targets at a national level, as yet (no overarching digitisation strategy).
Netherlands: The initiative to digitise lies with the cultural and governmental institutions. There is no overarching coordination at national level. Specific schemes, targets and indicators are set and monitored at a programmatic or institutional level. The national government does actively stimulate and support digitisation. The policy document of Minister Jet Bussemaker dated June 2013 “Cultuur beweegt. De betekenis van cultuur in een veranderende samenleving” emphasizes the importance of the accessibility of the digitised content for instance so it can be used in education. The development and utilisation of common infrastructures is promoted to achieve this goal. From this broad perspective on digital heritage, the ministry takes a role as a director and connector between the parties involved. The aim is to develop a widely supported policy and roadmap for the future years.

France: There is no national strategic framework for digitisation. Qualitative and/or quantitative targets for digitisation are specified in the context of multiannual contracts between the Ministry and the institutions (INA, BNF, CNC, ...). An evaluation of the policies on digitisation of cultural material was launched in September 2013 (in the framework of the programme MAP-EPP: Modernisation de l’ Action Publique – Evaluation des Politiques Publiques). The scope of the assessment, covering the years 2002 to 2012, concerns the intervention of the Ministry of Culture and Communication and its institutions in the following sectors: books and reading, cinema, audiovisual, museums and art organisations, heritage and archaeology, performing arts, research and higher education. The first, diagnostic phase will create an inventory of digitisation activities conducted by the Ministry and its institutions since 2002. The second phase involves lines of public action based on the first phase and the definition of reform scenarios for the next decade. Several lines of modernisation are under study: Development of a Ministerial strategic scheme for digitisation; Legal and economic issues; Management and governance of digitisation; Development of pooling; Expenditure control; Skills development. Several scenarios have been identified which could serve as a basis for the Ministry's strategy.

Regional schemes

Belgium: In the French Community, the Plan de préservation et d’exploitation des patrimoines PEPs (http://www.numeriques.cfwb.be/index.php?id=3111) is managed by the Délégation générale à la numérisation des patrimoines Culturels. By now, about 615,000 objects (audio, video, texts, still images, representations of physical objects) coming from +/- 30 institutions have been digitised within the framework of this plan. For the Federal Institutions, the planning and monitoring of the digitisation is carried out by the Belgian Science Policy Office within the framework of the Digitisation Plan of the Federal Scientific and Cultural Institutions. The first phase of this Plan was achieved in 2012/2013. The specific and detailed targets for the second phase (2014-2018) are being finalised. The launch of Phase 2 had to be delayed due to budgetary problems.

Mixed schemes

UK: While UK cultural organisations are very active in the field of Digitisation, there is no single plan or framework for the coordination and monitoring of digitisation of cultural material. At institutional level, individual museums, archives and libraries are developing Digitisation Policies and Strategies specific to their collections and the needs of their audiences. These tend to be funded and driven internally, with some external funding support on a project basis. At regional level, groups of organisations are coordinating some aspects of digitisation activity amongst themselves. Within the Home Nations (Scotland, Wales and Northern Ireland) there are overarching cultural heritage policies which make reference to Digitisation and online access to collections, and a good degree of coordinated effort, for example through the ‘People’s Collection Wales’ project funded by the Welsh Government and is a partnership between The National Library of Wales, National Museum Wales and the Royal Commission on the Ancient and Historical Monuments of Wales. No quantitative targets have been set at national level for the Digitisation of cultural material.
Targets do exist on a per-project or institutional basis, and individual organisations are encouraged to set and monitor metrics of their own.

**Austria:** The digitisation of cultural heritage is an important issue of the Austrian cultural policy. The Austrian Federal Ministry for Education, the Arts and Culture (BMUKK) has been continuing its efforts to force the digitisation of the federal museums, such as the Vienna Technical Museum, the Austrian Media Library, the Museum of Modern Art, and the Austrian Museum of Applied Art. Digitisation projects commissioned by the BMUKK were carried out from 2010 to 2013. Major cultural heritage institutions such as the Austrian National Library, the Austrian Mediathek, and the Austrian Film Museum have their own digitisation strategies and/or quantitative targets, and have completed large-scale digitisation projects since 2010 while other major initiatives are ongoing.

1.1.2 Qualitative targets

Member States were asked to report whether they have set qualitative targets for the digitisation of cultural material, and to specify any such targets and indicators for monitoring process, even though the Recommendation does not explicitly include this element.

Nine Member States reported the existence of recommendations or guidelines addressing qualitative targets, either as part of national policy or as widely recognised and used documents. Two different aspects of quality in the digitisation process are mentioned in their responses, as can be seen below. One aspect concerns compliance with technical requirements, international standards, metadata interoperability, etc. The other concerns the qualitative selection of material to be digitised.

Finland, Lithuania, Netherlands and Slovenia report the existence of recommendations or guidelines addressing qualitative targets on the national level.

![Q. 1.2 Qualitative targets?](chart)

**Finland:** The national guidelines for digitisation of analogue cultural heritage material are set as part of the National Digital Library. The qualitative targets are: quality of metadata, quality of the digitisation process, and transparency of selection criteria.

**Lithuania:** A List of standards and normative documents for the creation, preservation of and access to digital content recommended for the implementation of digitisation initiatives was approved in 2010, and Recommendations for the Creation of Digital Content that lay down the guidelines for the creation of digital content and organisation of digital collections were drawn up in 2011. Monitoring of the implementation of these qualitative objectives is to be carried out after a digitisation monitoring system is in place.
Netherlands: Some qualitative requirements are part of the law. Furthermore there are quality requirements that have been agreed at national level (self-regulation). These requirements, called De Basis (The Basics) are set for findability, creation, presentation, description and digital preservation at the minimal level (basic requirements). Institutions are expected to comply with these quality criteria. The requirements are based on international standards. The Basics are supported by various public funds and are also part of the national Museum Norm, used for certification of museums.

Slovenia: The Ministry of Culture is preparing Guidelines for Gathering, Long-term Preservation and Access to E-Cultural-Content as a result of comprehensive public debate on Digital Agenda in the Field of Culture that was carried out in partnership with European Commission in 2013. This document is designed as a check-list for practitioners and policy makers consisting of state of affairs analysis, typology of cultural heritage, implementation of ISO 14721 (OAIS) standard (already registered as national standard) as well as overview of relevant legal framework and necessary improvements.

In Austria, Germany, Italy, Poland and Slovakia, where no qualitative targets have been set at national level, there are guidelines set by the competent Ministries, domain-specific organisations or programmes, which are widely recognised and used in digitisation projects:

Austria: Applying common standards are requirements for projects commissioned by the Austrian Federal Ministry for Education, Arts and Culture.

Germany: No quantitative or qualitative targets at national level, as yet (no overarching digitisation strategy). However, the German Research Foundation, which finances most digitisation measures in Germany, has published widely used Practical Guidelines on Digitisation (http://www.dfg.de/formulare/12_151/), that define standards and best practices for the digitisation of a variety of materials (text based works, graphic representation, photographs, microforms, three-dimensional objects). The Guidelines also address the question of how to make a valid qualitative selection from the material available for digitisation, one major factor being the usefulness of a particular collection for science and research. They also advise on how best to avoid duplicate digitisation. Adherence to the DFG Guidelines is mandatory for all digitisation projects funded by the DFG. In fact, the DFG-guidelines are used by many digitisation projects in Germany even if they are financed by other parties.

Italy: ICCU provides guidelines, compliant to the international standards, to be followed in the digitisation projects; regarding the cultural relevance of the objects, the institutions are free to choose the most relevant ones according to the aim, the purpose and the profile of their collections.

Poland: The Ministry of Culture and National Heritage defines the quality objectives of digitisation of cultural resources through appropriate design of criteria for assessing the merits of proposals submitted by applicants for funding of the digitisation projects. The programmes treat as a priority: digitisation of resources in a poor state of conservation (especially films and exhibits); digitisation of the oldest resources, digitisation of important cultural resources of historic, artistic, educational or scientific significance; digitalization of valuable library resources belonging to the National Library Collections.

Slovakia: The digitisation activities under the programme are performed in accordance to the “manuals”, elaborated for specific domains, that set the standards for quality of digitisation, metadata etc. These standards are based on the European recommendations and are obligatory for all digitisation projects funded under the operational programme.

1.1.3 National and European overviews of digitised cultural material
Eleven countries reported some kind of monitoring tools to follow ongoing activities of digitisation of cultural material.

Q. 1.3 National and European overviews of digitised material?

Denmark, France, Lithuania, Netherlands, Czech Republic and Spain report annual monitoring processes or existing platforms for the systematic collection of data on the digitised cultural material at national level.

**Denmark:** The Danish Cultural Agency conducts an annual monitoring of digitisation progress.

**France:** Indicators for the digitisation of cultural resources figure in the annual reports of the organisations (eg, archives or libraries or museums). The call for projects "Numérisation du patrimoine et de la création", managed by the Ministry of Culture, provides for annual monitoring of projects selected in this context. The online catalogue "Patrimoine numérique" (http://www.numerique.culture.fr/pub-fr/index.html) describes digital cultural heritage collections (3116 collections) and associated multimedia productions (website, DVD-ROM, CD-ROM ...) and identifies the institutions responsible for digitisation projects in France. It is part of Michael (Multilingual Inventory of Cultural Heritage in Europe).

**Lithuania:** Monitoring of digitisation results in Lithuania is performed by the Ministry of Culture that monitors changes on the basis of annually collected reports on digitisation achievements from memory institutions. It should be noted that in 2012 the Ministry of Culture, in cooperation with the Martynas Mažvydas National Library of Lithuania, launched the development of a national digitisation monitoring system that will enable computerised collection of digitisation data from all memory institutions. In 2013, a team of experts has prepared a methodology for digitisation monitoring that takes account of the achievements of the projects NUMERIC and ENUMERATE. The development of the system is scheduled to be completed in 2014.

**Netherlands:** The DEN Foundation (Digitaal Erfgoed Nederland / Dutch Digital Heritage) provides an overview of all initiatives at portfolio level. This portfolio has the form of a web-based knowledgebase. This knowledgebase is based on self-reporting by the institutions and programs.

**Czech Republic:** This indicator [of digitised material] is automatically monitored under the National Digital Library (NDK) Project’s digitisation workflow. The Digitisation Register (http://www.registrdigitalizace.cz/rdcz/) maintained by the Czech National Library, is another significant activity, although it is not a programme or project. It helps reduce duplication in the process of digitising printed documents at national level.

**Spain:** Hispana, the Spanish national aggregator, allows monitoring progress.

Slovakia reports monitoring the progress using standardized procedures used in the implementation and monitoring of the EU Structural Funds. Finland and Sweden report surveys that have been carried out in the past, and an investigation is ongoing in the Czech Republic:
Finland: In 2011, a survey on digitisation of cultural heritage material of libraries, museums and archives between 2008 and 2011 was drawn up. Finnish institutions actively take part in the surveys of the Enumerate project.

Sweden: In 2010, all government-funded cultural heritage institutions were asked to provide basic information about their work.

Czech Republic: Quantification of the volumes of digitised material in the sector is part of the current investigation efforts (data and information collection) focused on the situation in digitisation; the outcome of this work, including a forecast of the future situation will be available in the first half of 2014.

Germany, Italy and the Netherlands stress that they have encouraged the institutions’ participation to the Enumerate project surveys.

Germany: The Deutsche Digitale Bibliothek supports Enumerate. Fulfilling its role as coordinator and initiator the Deutsche Digitale Bibliothek will invite all the 2,000 cultural heritage institutions registered with the Deutsche Digitale Bibliothek to participate in the second Enumerate survey.

Italy: ICCU distributed among professional mailing lists the 2012 and 2013 Enumerate questionnaires about the progress of digitisation.

Netherlands: The Digital Facts project (http://www.den.nl/pagina/480/The-Digital-Facts) provided the Dutch contribution to the EU projects Numeric and Enumerate.

1.2 Public - private partnerships

Point 2 of the Recommendation invites Member States to encourage partnerships between cultural institutions and the private sector in order to create new ways of funding digitisation of cultural material and to stimulate innovative uses of the material, while ensuring that public private partnerships for digitisation are fair and balanced, and in line with the conditions indicated in the Annex;

Fourteen countries reported current or planned public-private partnerships to co-fund digitisation of cultural material.

Q. 2.1 Public-private partnerships for digitisation or facilitating access to CH?

![Pie chart showing the distribution of responses to the question Q. 2.1 Public-private partnerships for digitisation or facilitating access to CH.]

YES: 12
NO: 13
N.A.: 7

The Netherlands and the UK report Public Private Partnerships (PPPs) to be reasonably well developed practice for digitisation in their countries:

**Netherlands:** On average the funding by Public-Private Partnership (PPP) is 9% of the entire digitisation budget in the Netherlands.

**UK:** The practice of Public Private Partnerships is reasonably well-developed in the UK, with a particular emphasis on partnerships between national institutions (museums, archives and libraries) and private-sector partners with a specific interest in digital content and online services.

Seven more member states (Austria, Czech Republic, Denmark, France, Germany, Italy, Spain) report important PPPs for large scale digitisation projects, mainly in the library sector. The main private partners are:

- **Google:** The KB in the Netherlands (160,000 out-of-copyright works), the Bavarian State Library (over 1m titles of copyright free historical holdings)\(^\text{10}\), the National Library of the Czech Republic (200,000 old prints and 19th century prints), the Austrian National Library (600,000 volumes of public domain works), National Central Libraries at Rome, Naples and Florence in Italy (700,000 out-of-copyright Italian books ranging from 1601 to 1874) have established a partnership with Google for Google Books; Denmark reported also the participation of the National Gallery of Denmark to the Google Art Project.
- **Proquest:** The KB in the Netherlands (early printed books prior to 1700), the Royal Library in Denmark (older works in the collections) and the BnF in France (books from 1470 to 1700) have established a PPP with Proquest;
- **Schibsted:** The National Library and National Archives in Sweden have a partnership with the media group Schibsted (for newspapers digitisation);
- **Telefónica:** National Library of Spain (sponsorship).

PPPs, established or under negotiation, with other non-EU partners have also been reported:

**Malta:** Most of the digitisation carried out by the National Archives of Malta was with non-EU partners. On the whole, the agreements in question are in line with the EU Recommendation, and there is no exclusivity clause included. The three entities with which the National Archives of Malta entered into collaboration agreements are the following:

Family Search, 50 East North Temple Street, Salt Lake City, Utah 84150 USA; Hill Museum and Manuscript Library, 2835 Abbey Plaza, Saint John’s University, Collegeville, Minnesota; United States Holocaust Memorial Museum, 100 Raoul Wallenberg Place, SW, Washington, DC20024-2126.

**Latvia:** The National Archives has started negotiations with the FamilySearch (https://familysearch.org/about) on digitisation of documents for genealogy research. Agreement is not yet concluded.

In some countries, PPPs for improved access to or for innovative use of cultural material have also emerged:

**France:** The partnership "Sound Collection" of 19/11/2012 with Believe Digital and Memnon Archiving Services concerns the digitisation of 200 000 records released before 1962 and their distribution on 112 digital platforms in more than 100 countries (free streaming / download). The partnership "Offre de streaming aux bibliothèques" of 24/04/2014 with Arte

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\(^{10}\) Germany has reported that in the Bavarian State Library case, key principles 3 and 4 (transparency of the process and of agreements) have not been adhered to in the agreement.
France and Le Meilleur du Cinéma (LMC) concerns the development of a ‘streaming’ service, offering access to digital books and music from the collections of BnF (around 300,000 titles and 20,000 e-pubs) to users of other libraries and cultural institutions. The service will be available in the autumn of 2014, as part of the "Médiathèque Numérique" http://international.mediatheque-numerique.com/ and aims to offer free access to books and records from BnF to 400 libraries, potentially representing 1.5 million users.

Netherlands: In the Open Culture Data Hackaton, several apps have been developed by the creative industry (see: http://www.opencultuurdatal.nl/competition/). Dutch institutions are taking part in initiatives in which cooperation with private parties is at the core of the policy (see: http://www.appsforeurope.eu/en). Within the national programme for supporting Creative Industries (CLICK) there is a special programme to strengthen PPP in the cultural heritage domain.

Italy: The MOVIO project is a PPP initiative coordinated by the ICCU and co-funded by the Telecom Italia Foundation to develop an open source kit for staging virtual online exhibitions, aimed at cultural institutions, which can use it to highlight the masterpieces held in their collections.

Italy: The Online Public Access Catalogue (OPAC) of the National Library Service (SBN) was opened to the publishers’ catalogues (Amazon, AbeBooks): when the SBN user lands on these online selling platforms and buys books, SBN has a revenue of the 10% upon the total of the purchase.

Greece: A possible PPP, under consideration for approval by the Hellenic Ministry of Culture, refers to developing mobile information systems for usage in museums and other archaeological sites. A specific proposal has been made for Delphi with the assistance of the Society of Diazoma.

On the other hand, several Member States report that the PPP model has not been successful on a smaller scale - such as for smaller institutions or smaller linguistic areas:

Belgium: In the federal authority’s digitisation plan for 2014-2018, the initial idea of PPPs has been abandoned (for legal, organisational and financial reasons)

Estonia: The model is difficult to implement in small linguistic and cultural areas – private companies not interested as they are not able to make a profit. Thus, for small linguistic and cultural areas, public funding is crucial and PPP could not necessarily provide a good solution for funding digitisation.

Germany: Negotiations for projects on a smaller scale between individual institutions and the private sector were not successful – we conclude that in general PPPs do not seem to be the most promising way forward and that state funding will continue to play a major role in digitisation measures.

Lithuania: Several-year experience has shown, however, that the private sector still continues to underrate memory institutions as potential partners in project implementation, and memory institutions mostly collaborate with IT companies that help to develop software facilities for the dissemination of digitised content.

Luxembourg: The small market size of Luxembourg makes it difficult to define exclusive or monetisable uses of content for such partnerships.

UK: Implementation of PPP arrangements amongst smaller local and regional museums, libraries and archives is very limited in the UK.
1.3 Use of Structural Funds

Point 3 of the Recommendation invites Member States to make use of the EU’s Structural Funds, where possible, to co-finance digitisation activities in the framework of regional innovation strategies for smart specialisation;

Fourteen Member States report that they have been using Structural Funds for digitisation of cultural material and related services during the last programming period 2007-2013. These are: Austria, Czech Republic, Germany, Greece, Estonia, Finland, Italy, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, and Sweden.

**Q. 2.2 Use of structural funds to the digitisation of cultural material?**

![Pie chart showing the use of structural funds for digitisation]

Reported budgets vary among the Member States. Not all countries have provided detailed information on the allocated Structural Funds budgets for digitisation and related activities, but, for the programming period 2007-2013, most countries fall in the range of 1 to 25 million euros while Greece has invested up to 145 million euros and Slovakia approximately 195 million euros (including the Slovak Republic co-funding). Funding comes mainly from the European Regional Development Fund, while in Finland and Slovakia a small amount from European Social Fund has also been used - 0.8 million and 0.3 million respectively.

Poland, Slovakia, Lithuania, Latvia and Greece have used Structural Funds as the main funding source for implementing their digitisation strategies and/or programmes. In addition to the allocation of budgets for digitisation of different types of material (such as ecclesiastical registries and archives (AT), cinematic heritage (AT, PL), historic photographs and documents (AT, PL), literature heritage (PL), archaeological collections (GR), museum collections (GR), archive collections (GR), library collections (IT, CZ - more than 50 million pages are to be digitised by the end of 2019), newspaper digitisation (SE, PL), etc), it is often the case that budgets from Structural Funds are allocated to the development of information systems and e-services in the field of culture, for which digitisation may be a part (eg. virtual museums including exhibits digitised in the form of three-dimensional images (PL), virtual libraries (PL, LT), educational project (AT), etc), the development of a digitisation strategy (MT), the setup of regional digitisation workplaces (CZ) or the supply of digitisation equipment (MT).

Besides, it is envisaged that several countries will add provisions for using Structural Funds for digitisation and e-culture activities in their Partnership Agreements and Operational Programmes for the next programming period 2014-2020.

1.4 Pooling of digitisation efforts

Point 4 of the Recommendation invites Member States to consider ways to optimise the use of digitisation capacity and achieve economies of scale, which may imply the pooling of
digitisation efforts by cultural institutions and cross-border collaboration, building on competence centres for digitisation in Europe;

Twelve countries report steps taken to optimise the use of digitisation capacity and achieve economies of scale through pooling of digitisation efforts, cross-border collaboration or building on competence centres.

Q. 2 Practical measures to optimise use of digitisation capacity?

Germany, Estonia, Austria and Slovakia report that competence centres performing domain specific digitisation are in place:

**Germany:** Besides the long-established centres in Munich (Bavarian State Library) and Göttingen (State and University Library) large-scale facilities in Dresden, Jena, Münster and Berlin have also been established. In the archival sector two competence centres exist, the State Archives of Baden-Wuerttemberg and the Federal Archives.

**Estonia:** In Estonia, digitisation is assigned to relevant competence centres such as the Estonian National Library, Estonian Public Broadcasting, The National Archives of Estonia and State Conservation Centre Kanut.

**Austria:** The Austrian Mediathek is a competence centre for digitisation of audio and video. For example, digitisation of audio carriers from the Austrian National library is performed by the Austrian Mediathek.

**Slovakia:** The principles on which the [national] digitisation projects are built include building specialized national digitisation worksite for each type of content held by cultural institutions – e.g. library materials are digitised in the Digitisation centre of the Slovak National Library, materials like paintings or statues in the digitisation worksite of the Slovak National Gallery etc., which make use of economies of scale and concentrate the specific know-how necessary to safeguard the quality of outputs in one place nation-wide.

Latvia, Lithuania and Poland report the establishment of competence centres that are primarily engaged with the coordination and support of digitisation activities, such as providing information, organising trainings for digitisation specialists of cultural institutions, storing digital copies of digitised material, or collaborating with other competence centres for exchanging experiences at European level. Digitisation is carried out occasionally.

**Poland:** In order to optimize the opportunity for digitising various types of cultural resources, the Minister of Culture and National Heritage entrusted five institutions with the function of Competence Centres (National Audiovisual Institute, National Digital Archives, National Library, National Heritage Board of Poland and National Institute of Museology and Collections Protection), which are intended to be the leading institutions in specific areas and act as models for other institutions.

**Latvia:** The National Library of Latvia, the Culture Information Systems Centre and the National Archives of Latvia are institutions, which are and will be providing support and will
consult municipal and private institutions in issues relating to digitisation and digital preservation as well as providing digitisation services and digital preservation services.

**Lithuania:** Three national and eight regional digitisation centres are primarily engaged in the coordination of Lithuanian cultural heritage digitisation activities on a national scale and between the sectors and ensure the dissemination of digitisation knowledge and information on a national and international scale. It should be noted that, although the digitisation centres offer possibilities for digitising the content of other memory institutions, this service is not used often as smaller institutions still underestimate the benefit of digitisation.

In Hungary, similar goals are pursued through a specific project in the libraries sector, while in Belgium there are plans for an inter-institutional collaboration:

**Hungary:** The ELDORADO project aims at co-ordinating digitisation activity at national level, providing infrastructure for participating libraries to support their digitisation work, thus encouraging the best use of resources.

**Belgium:** In the federal authority’s digitisation plan, it is aimed to create a real inter-institutional collaboration with common investments, to develop a professional infrastructure, to promote joint data management and digitisation activities focused around sectors.

Concerning cross-border collaboration, the Netherlands refer to their role in PrestoCentre\(^\text{11}\) (which is hosted at the Netherlands).

**Netherlands:** Expertise gained through the ‘Images of the Future’ project (A/V heritage) is fed into PrestoCentre and is also used to assist smaller institutions through the Audiovisual Archives Network.

Finland, Latvia and Poland refer to membership of institutions from their countries to the IMPACT Centre of Competence\(^\text{12}\).

**Latvia:** Through participation in this network digitisation experts from the National Library of Latvia have an opportunity to widen up a cross-border collaboration and improving their know-how in order to support other cultural and memory institutions at the national level.

## 2. DIGITISATION AND ONLINE ACCESSIBILITY: PUBLIC DOMAIN MATERIAL

Over the reporting period web visibility of cultural content has improved, measures to limit watermarking/visual protection measures in the public domain material and increased use of the open formats and social networks to reach out to broader audiences have been reported. This in turn allowed innovative interactions with digitised content to take place e.g. in social media, blogs or crowd-sourcing platforms. The adoption of Directive 2013/37/EU on the reuse of public sector information, now covering also cultural material, alongside the wider availability of APIs, mobile apps and better resolution and metadata triggered wider reuse opportunities over the period.

However, this part of the Recommendation has not always been well addressed for several reasons: while some institutions like the Rijksmuseum with its RijksStudio application have widely opened up for free re-use their digitised public domain material

\(^{11}\) [https://www.prestocentre.org/about-us](https://www.prestocentre.org/about-us)

\(^{12}\) [http://www.digitisation.eu/](http://www.digitisation.eu/)
in high resolution format, this is more the exception than the rule and contractual or statutory constraints remain in the way of this Recommendation objective.

Point 5 of the Recommendation invites Member States to improve access to and use of digitised cultural material that is in the public domain by:

(a) ensuring that material in the public domain remains in the public domain;

(b) promoting the widest possible access to digitised public domain material as well as the widest possible reuse of the material for non-commercial and commercial purposes;

(c) taking measures to limit the use of intrusive watermarks or other visual protection measures that reduce usability of the digitised public domain material.

2.1. Preserving public domain status after digitisation

Nine Member States (BE, CY, DE, FR, IT, LT, NL, RO, SI) reported obstacles in ensuring that public domain material remains in the public domain after digitisation, mainly in connection with photos and photographers' rights. The complex issue of a new layer of rights triggered by the digitisation process itself in some cases is mentioned as a potential source of legal uncertainty. The fear of losing control, use of public domain material to generate income and difficulties to assert public domain status were also reported as possible obstacles, alongside technical issues in connection with upgrading of metadata quality of digital records. In general, the replies indicate that the legal stand of some digital reproductions of public domain works lacks clarity and requires further attention.

Promoting the Europeana Public Domain Charter\(^{13}\) published in April 2010 was mentioned by one Member State (LU) as a means to implement this Commission recommendation, while another one (BE) complained that the way the Europeana Data Exchange Agreement\(^{14}\) was implemented had an impact on the quality of metadata submitted by some content providers (limited to only basic metadata). One Member State (SI) reported Guidelines under preparation to address this problem, including overview of legislative changes required.

Q. 5.1 Obstacles to digitised public domain remaining in the public domain?


\(^{14}\) http://pro.europeana.eu/c/document_library/get_file?uuid=deb216a5-24a9-4259-9d7c-b76262e4ce55&groupid=10602
Germany: some cultural heritage institutions hesitate to provide open access to digitised versions of their public domain material. Partly this results from the fear of losing control, partly from the practice respectively necessity, of using public domain material as a way to generate income. Partial ambiguities in the legal framework, insecurities regarding the legal status of certain material and the time and labour consuming research for copyright holders provide high obstacles to declare material in the public domain. Some cultural heritage institutions hold the opinion that a photograph of a Renaissance painting is itself a work of art and therefore protected by copyright. This allows them to restrict the use of digital representations of their material or to charge for the use of said photographs while at the same time forbidding the taking of any other photographs of the painting. In some cases, it is debatable if a photograph of a two dimensional work fulfils the criteria for being a work of art itself. However, since no finally binding decisions exist, this has to be judged on a case-by-case basis and so in practice the public domain use of such material is being restricted in this way.

Finland: the problem of material in the public domain not remaining in the public domain after digitisation concerns normally only images i.e. paintings etc. that are photographed in the digitisation process. A photographer's related right (Section 49a of the Finnish Copyright Act) does normally emerge for the photograph. Finland is not in favour of limiting the public domain. The institution digitising the images could prevent the adverse effect of this right by transferring in an agreement with the photographer his or her rights to the institution and allowing the use of public domain material without permission.

The Netherlands: in general, the obstacles are legislative: Copyright in reproductions (e.g. photographs) of public domain objects, legislation on portraits; database rights legislation, legislation on privacy rights. Public-private partnership contracts KB concluded with Google and ProQuest restrict third parties' reuse possibilities of the scans made by these companies, of which KB gets a copy (all restrictions regarding use or distribution of the digitised works terminate after 15 years). The Directive on reuse of public sector information and the database right enable cultural institutions to ask fees for the provision of public domain material.

Italy: the digitisation outcomes of public domain cultural assets, even though it is done with public money may not be entirely available for public domain: the description and low resolution images are usually freely available to the public but not the master copy or high resolution copies. Moreover, according to the national legislation on cultural heritage, public cultural institutions can ask for fees on the reproduction of the digital images of their collections, although they have been produced with public money.

Slovenia: according to Article 101 of the Copyright and Related Rights Act, the employer is right holder for 10 years only. Afterwards, economic and other rights belong to the author (e.g. photographer). That prevents putting public domain material online. The Guidelines for Gathering, Long-term preservation and Access to eCultural Content under preparation are addressing this problem with numerous practical recommendations to the employers (how to draw up the contract), policy-makers (overview of legislative provisions that need to be revised) and practitioners.

Romania: according to the Romanian Copyright Law, the author of a photographic reproduction of a public domain work has the copyright on the reproduction, so the digital images of a public domain work are not in the public domain. The problem is not yet addressed, due to the opposition of the photographers.

United Kingdom: although there is no overarching legislation to ensure that public domain
material remains in the public domain after digitisation, there is a growing trend – e.g. the new funding framework from the Heritage Lottery Fund – towards policies which promote open access to and re-use of digitised material.

Cyprus: in some cases, a change of a domain was necessary due to some upgrades to the metadata quality of the existing digital records.

2.2 Access to and use of digitised public domain material

Twenty Member States report supporting actions for wider access or use of digitised public domain material. Support may take place at national or lower level (local, institution or sector) and take a variety of forms or a combination thereof, from the use of wikis, social networks, crowdsourcing or web and media campaigns (FI, FR, PL, SE) to dedicated portals (BE, CZ, FR, FI, HU, PL, UK), from open data policies, open licenses and CCO\textsuperscript{15} disclaimers (FR, FI, LU, UK) to aggregators and data hubs (AT, CY, DE, EE, FI, GR, IT, NL, PL, UK), APIs, searchable indexes, open standards or other technical tools (DE, FR, FI, UK), from competence centres for digitisation (PL) to binding provisions to that effect attached to digitisation arrangements (AT, BE, DE, ES, FI, GR, IT, LT, PL, UK). One country (FR) reported a tool for assessing the public domain status of works to facilitate exploitation thereof and another two (LV, MT) reported promotional activities, collaboration with educational institutions as well as training and support provided to public libraries in order to promote access and use of digitised materials.

Two Member States (AT and CY) reminded that signing of Europeana DEA is a requirement for cultural institutions being aggregated for Europeana, another (LT) funds yearly public tenders to enhance use of digitised material and one Member State (NL) set up working groups to analyse digitisation standards, metadata and strategies for widest possible access to public domain material.

As far as re-use is concerned, some Member States referred that this would be dealt with in the light of and consistently with the implementation of the public sector information Directive\textsuperscript{16} adopted by the end of the reporting period (transposition deadline: 18 July 2015) and now also covering libraries, museums and archives.

However, two Member States (IT, LT) informed that, while the description and low resolution images of public domain works are usually freely provided to the public, higher resolution copies may not. Furthermore, restrictive clauses in public-private partnership contracts were also reported by one Member State (NL) as preventing wider access to digitised public domain material for up to 15 years.

Lastly, one country (UK) reported a series of coordinated efforts to promote open access and re-use of digitised material, including funding frameworks, pilot digitisation consortia, metadata aggregators, web archiving projects and dedicated platforms.

\textsuperscript{15} Creative Commons Zero or Dedication to the Public Domain.

**Poland:** in the recent years, promotional activities of digital libraries were focused in particular on the role of social networking. That is why the most popular methods of promoting digital collections include managing digital libraries profiles on Facebook (all major digital libraries in Poland have their accounts), introducing information on the most attractive digital content to Wikipedia, publication of selected scans and content from digital libraries in popular photo sites such as Flickr or Pinterest, posting information about new products in digital libraries on Twitter as well as undertaking activities popularizing digital libraries in online editions of local newspapers. Within the framework of Polish Competence Centres for Digitisation, a new National Digital Library 'Polona' (http://polona.pl) launched in June 2013 was advertised in the official and social media. Users can also browse and download digital copies of over 7,000,000 scanned archival materials freely available through the Search the Archives Service (www.szukajwarchiwach.pl) and freely access and process the public domain material among the nearly 190,000 historical photographs made available through the Audiovis service (www.audiovis.nac.gov.pl). The National Heritage Board of Poland has been sponsoring initiatives such as "Wiki likes monuments", cooperating with NGOs like the Digital Centre-Project Poland under the crowdsourcing-based project "Open Monuments" and virtual tools such as the mobile app "Monuments of Poland" (http://e-zabytek.nid.pl) allowing access to digital images of the historic monuments via mobile devices. The National Audiovisual Institute operates a multimedia portal (http://ninateka.pl) for sharing resources available from digitisation processes, as well as production and co-production. Besides, as part of Europeana Awareness project, the Poznań Supercomputing and Networking Centre has developed a widget which allows to embed automatically generated links to digitised cultural heritage materials on any website (https://github.com/psnc-dl/wp-chcontext). The widget will be used to promote Europeana and its content among public libraries and broadcasters in Europe.

**Belgium:** Open Cultuur Data (http://opencultuurdata.be) is a Flemish partnership helmed by PACKED focusing on the awareness of open data in the cultural sector and providing technical assistance for publication of open data. The Internet cultural portal of the General delegation (French Community) will give access to a selection of the digitised material. At federal level, a specific public-oriented website for the Belgium newspapers and the newspapers under censorship during the two world wars is being developed.

**Luxembourg:** there is widespread adoption of open data principles. Cultural events available from plurio.net (http://www.plurio.net/) are available under Creative Commons Zero, allowing commercial re-use. It is a major success story receiving wide, commercial and non-commercial re-use in the Greater Region\(^\text{17}\). Databases such as the catalogues of the National Library are licensed as open data.

\(^{17}\) Including Saarland, Lorraine, Luxembourg, Rhineland-Palatinate, Wallonia and the rest of the French Community of Belgium, and the German-speaking Community of Belgium.
**Finland:** Government Resolution of 3 March 2011\(^{18}\) sets out the principles on improving the accessibility and promoting the reuse of public information resources in digital format. The National Board of Antiquities has opened in 2012 its geospatial database service for free reuse and the National Digital Library plans to open limited public collection metadata for non-commercial purposes. The National Archives has drawn up a plan for geo-referencing digitised historical map collections and showing them in a map service. In cooperation with FamilySearch, MyHeritage and Microtask Oy, it has created searchable indexes to enhance the use of digitised church population records. The Institute of languages of Finland runs an online data service Kaino (http://kaino.kotus.fi) containing freely accessible dictionaries and collections is being boosted by new solutions supporting diversified uses of linguistic collections in cooperation with Fin-Clarín, to promote opening data resources for reuse (e.g. APIs, file downloading services, crowdsourcing). The Finnish National Gallery developed and published an API\(^{19}\) to get information about the more than 36,000 artworks it manages and serve developers who wish to build applications, websites and mash-ups.

**Sweden:** the national state-funded museums have signed a Letter of Intent with Wikimedia Sweden concerning collaboration to produce and publish content on Wikipedia with the aim to widely spread material that can be used in learning situations, especially with the schools as target group\(^{20}\).

**Italy:** Culturalitalia (http://www.culturalitalia.it/), the national cross-sector aggregator gathering digitised cultural material from all sectors in cooperation with the Italian Regions and the scientific support of the Scuola Nuova Superiore de Pisa proposes a guided access to millions of informational elements on the country’s vast cultural universe. At present it gathers over 2.3m records from 35 content providers and aggregators. Internet Culturale (http://www.internetculturale.it) allows users to search and browse through over 12m bibliographic records of the National Library Service (SBN), 10m digital items of Italian libraries, 400 000 records from the databases Edit 16 (16\(^{th}\) century editions), Manus (manuscripts) and ReMI (Ricordi music archives). The user experience is enriched by cultural oaths, exhibitions, 3D objects, editorials, etc.. For the period 2011-2013, Internet Culturale has provided over 120 000 xml records (encoded with MAG standard) to Europeana.

**Lithuania:** Lithuanian memory institutions that digitise cultural heritage objects using State budget and EU Structural Funds must make such objects available for public use without restrictions and without infringement of copyrights. At present, a discussion is going on with the national digitisation centres concerning the problem that, seeking to control the use of digitised works, the centres only present low resolution images to Internet users, and users can get images of a better quality only on submitting an e-enquiry.

**Austria:** promoting the widest possible access to digitised public domain material is a requirement in projects commissioned by the BMUKK. Signing the Europeana data exchange agreement (DEA) is a requirement for being aggregated for Europeana by the national aggregator Kulurpool.

**The Netherlands:** reuse of digitised public domain books in KB’s and University Library’s database [www.EarlyDutchBooksOnline.nl](http://www.earlydutchbooksonline.nl) is permitted including for commercial purposes. KB and the National Archives have a Wikipedian in residence working on making public domain collections available in Wikipedia. Open Cultuur Data (Museums and the Web Paper) aggregates cross-sector public domain datasets [http://www.openculturedata.nl/datasets](http://www.openculturedata.nl/datasets).

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\(^{19}\) [http://kokoelmat.fng.fi/api/v2support/docs/#/overview](http://kokoelmat.fng.fi/api/v2support/docs/#/overview).

\(^{20}\) [http://se.wikimedia.org/wiki/Avsiktsf%C3%B6rklaring_Centralmuseernas_samarbetsr%C3%A5D](http://se.wikimedia.org/wiki/Avsiktsf%C3%B6rklaring_Centralmuseernas_samarbetsr%C3%A5D).
France: in a partnership between the Ministry of Culture and Communication and the Open Knowledge Foundation, a public domain calculator (http://calculateurdomainepublic.fr) was developed with the assistance of the French National Library, which contributed a set of metadata from its http://data.bnf.fr corpus. The calculator will assist in the exploitation of the digital public domain initiated by the Ministry and offers to the public a pedagogic tool to better apprehend the legal status of works and value of metadata it generates. The Ministry is firmly engaged in implementing the Government policy regarding the opening of public sector data (open data) and will focus on creating a truly dynamic ecosystem around its cultural resources. The open data policy desired by the President and the Prime Minister is a matter of substance which today feeds the reflections of all cultural actors operating in the digital economy. It represents an important growth driver for the French cultural economy and development strategy changes of cultural institutions. Spurred by the Etalab mission and the Trojette report, an assessment of business models based on the reuse of public cultural data has been initiated by the Ministry. Students, researchers, designers, digital entrepreneurs, start-ups, all can derive value from a number of cultural data: statistical and economical cultural data, metadata, visual files from public domain works, etc. The Dataculture hackathon organized in the Digital Fall 2013 event has shown the potential offered by this greater openness of public data. An Open Data tutorial has also been made available in the Ministry’s website (http://www.culture.fr/Professionnels/Reutilisation-de-resources-Culture/Guide-Data-Culture) and a Data Culture Guide published in 2013 (‘Guide data culture. Pour une stratégie numérique de diffusion et de réutilisation des données publiques numériques du secteur culturel’).

United Kingdom: there is no central project or scheme to promote the widest possible access to digitised public domain material per se. Instead, there are a number of coordinated efforts to promote the opening up and distribution of digital cultural content for creative re-use. The National Archives is working with the Archives and records Association on a pilot digitisation consortium21 and is currently bringing together over 100 services to digitise school registers dating from before 1914. The Heritage Lottery’s Fund’s new funding framework conditions the funding to the digitised content being made openly available for re-use after the project. Culture Grid (www.culturegrid.org.uk) continues to act as an aggregator and distribution channel for digital cultural metadata, including the sharing of UK material with Europeana under the Data Exchange Agreement. Both the National Archives and the British Library are running large-scale web archiving projects designed to promote ongoing access to previously-digitised material. In the arts and culture sector, the joint BBC/Arts Council England initiative ‘The Space’ is providing a platform focused on connecting end users to rich digital content.

Hungary: the ELDORADO project of the National Library, to start operation late October 2014, aims at allowing as wide as possible free access to digitised cultural materials in the public domain. The business model elaborated for the ELDORADO service promotes the reuse of digital content.

Cyprus: a national aggregator was established hosted in a domain http://www.cmoec.org.cy8081/repox/ which allows it to function as a dark aggregator for all digitised collections. This is the preliminary phase to becoming an Online Public Access Database which will provide access to all digital collections from all providers (next project).

Latvia: The National Library of Latvia organizes promotional activities and collaborates with educational institutions to promote access and use of digitised materials and collections of the National Digital library. The Culture Information Systems centre provides training and

support to public libraries to promote use of both the National Digital library and Europeana.

**Malta:** The 18th International Conference on Theory and Practice in Digital Libraries organized in 2013 by the Library, Information and Archive Sciences Department of Malta’s Faculty of Media and Knowledge Sciences included a tutorial on Mapping cross-domain metadata to the Europeana Data Model (http://tpdl2013.upatras.gr/tut-edm.php).

### 2.3 Unhindered usability of digitised public domain material

The Recommendation calls on Member States to promote unhindered usability of digitised public domain material by taking measures to limit the use of intrusive watermarks or other visual protection measures that reduce the usability thereof. Although generally speaking Member States adhere to this endeavor, only fourteen (AT, CY, CZ, DE, EE, ES, FI, GR, LU, LT, MT, PT, PL and UK) have reported measures actually taken, or being considered, in order to implement it in practice.

Measures range from excluding the use of visual protecting technologies altogether or in particular sectors, normally libraries or archives (CY, EE, LU, LT, MT, PT), to limiting use of watermarks, if any, to non-visible/intrusive ones (DE, EE, PL, UK), switchoffable (CZ), or only applied to copyrighted material (DE, UK), to excluding protection measures in cultural institution’s or government funding arrangements (AT, ES, GR, PL). One Member State pleads for best practice guidelines in this area (FI), whereas another (DK) declared not being aware that this is a problem, and still another one (NL) informed that watermarking of digital material is generally considered as a bad practice.

In most cases, initiatives taken for reducing visible watermarks remain fragmented or limited to smaller scale or institution-level efforts, rather than national-scale, overarching ones.

**Q. 5.3 Measures for unhindered usability of public domain?**

![Pie Chart](chart.png)

**Luxembourg:** the National Archives have agreed not to use restricting technologies (DRM, watermarks, resolution limitation) in their current and future projects. Work in progress includes replacement of past use of watermarks at the national Archives with fully re-usable digital objects whenever possible.

**Germany:** as part of the Deutsche Digitale Bibliothek a project researches the integration of non-visual watermarks which also allows tracking of the re-uses of the watermarked material. These watermarks, however, will only be added to copyrighted material.

**Portugal:** the National Library does not use any of these protecting measures.

**Poland:** use of digital watermarks is quite common in Polish digital libraries using software dLibra. These are invisible watermarks, embedded in the data or digital picture that do not impede the reading of the text or hinder detailed presentation of the image. However, the National Library adopted – as a policy - non-use of watermarks in digitised objects from its own collections, making the digital public domain resources available in the National digital
library Polona (http://www.polona.pl/) in open and widely accepted formats with no visual security measures or watermarks to facilitate re-use. Watermarks used in digital copies published on websites "Search the Archives" and "Audiovis" are non-invasive. The National Institute of Museology and Collections Protection suggests reducing the use of over-exposed watermarks or other visual security measures which limit the usefulness of digitised material in the public domain. Historical material digitised by the National Heritage Board of Poland do not contain watermarks.

Austria: the use of watermarks or other visual protection measures reducing their usability is not provided in projects commissioned by the BMUKK.

Finland: there should be best practice guidelines to restrict the use of watermarks etc. on public domain materials. Limiting the use of intrusive watermarks is under discussion in the Finnish museum sector at the moment.

Spain: according to calls for funding, intrusive watermarks should be avoided.

Greece: the requirement has been included in many calls for proposals under the Digital Convergence Programme, although not in a unified format yet.

United Kingdom: there have been some smaller-scale efforts to implement protection measures that do not depend on a visible watermark (such as the use of IPTC encoded metadata headings to record attribution/licensing terms). In clearly public domain collections, images have been made available with no watermarking.

Cyprus: we encountered some digital collections with watermarks and other visual protection. The cultural services have made it aware that such measures should not be applied and they are gradually being removed.

Malta: No watermarking has been used in the holdings of the Maltese public entities.

3. DIGITISATION AND ONLINE ACCESSIBILITY: IN-COPYRIGHT MATERIAL

The adoption of the orphan works Directive in 2012, as well as of legally-backed collective licensing solutions for wide-scale digitisation of out-of-commerce works in a number of countries, contributed to improve the conditions for bringing in-copyright content online, as did the development of digital rights clearance platforms such as ARROW or FORWARD, which significantly reduce the time and costs involved in clearing rights for the relevant type of content.

Point 6 of the Recommendation invites Member States to improve conditions for the digitisation and online accessibility of in-copyright material by:

a) rapid and correct transposition and implementation of the provisions of the Directive on orphan works and close monitoring of the Directive’s application;

b) creating the legal framework conditions to underpin licensing mechanisms identified and agreed by stakeholders for the large-scale digitisation and cross-border accessibility of works that are out-of-commerce;

contributing to and promoting availability of databases with rights information, connected at the European level, such as ARROW.
3.1 Rapid and correct transposition of the orphan works Directive

More than one year after adoption of the orphan works Directive\footnote{Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on certain permitted uses of orphan works, JO L 299 of 27.10.2012, p. 5.}, only two Member States (DE and HU) have adopted legislation to transpose it during the reference period (transposition deadline: 29 October 2014), while another Member State (UK) has adopted empowering legislation to introduce an orphan works licensing scheme and others have tabled draft implementing legislation in their respective Parliaments (ES, RO) or plan to do so soon (e.g. MT). Some countries (e.g. FR) are still consulting on the best way to transpose the Directive into their legal order.

It should be said that some Member States (DK\footnote{Consolidated Act No. 202 of 27 February 2010 on Copyright, § 50, subsection 2. For historic background see: \url{http://www.bne.es/opencms/es/LaBNE/Docs/2010-04-13_Orphan_works_in_a_Danish_perspective.pdf}.}, HU\footnote{Act CXII of 28 December amending the 1999 Copyright Act, completed by Government Decree 100/2009, entered into force on 16 May 2009.}) already had legislation to enable digitisation and use of orphan works prior to the Directive, though with a different scope and features that have now to be updated in the light of the Directive\footnote{The following reports provide more information on the issue of orphan works prior to the Directive: \begin{itemize}
  \item In from the Cold – An assessment of the scope of 'Orphan Works', JISC (2009): \url{http://www.jisc.ac.uk/media/documents/publications/infromthecoldv1.pdf}
\end{itemize}}.

Some Member States (e.g. ES, PL) also envisage incorporating the transposition of the orphan works Directive in broader updating of their copyright legislation,\textbf{ notably to facilitate digitisation and online accessibility of copyrighted content under specified conditions}, regardless of their orphan status.

![Pie chart showing transposition results]

Q. 6.1 Rapid and correct transposition of the orphan works Directive?

\begin{itemize}
  \item YES: 2
  \item NO: 23
  \item N.A.: 7
\end{itemize}
Germany: The EU Directive on orphan works has been transposed into German federal law by the German Parliament on 27 June 2013. We expect that the practical regulation will be in place in Spring 2014. Insofar as the Office for Harmonisation in the Internal market (OHIM) is in charge of implementation, relevant stakeholders are discussing proposed workflow organization. For books, a solution has been proposed, which is based on the existing data infrastructure making use of authorized data records provided by the German National Library.

Hungary: The Directive has been implemented both by a law and a government decree. General, theoretical issues are included in Law CLIX of 2013 about amendment of certain laws related to intellectual property, effective as of 29 October 2014, appearing as a separate chapter (IV/A) within the Law on Copyright. Government Decree 138/2014 (IV.30.) on the detailed rules of using orphan works was published in the 61/2014 issue of the Official Gazette.

United Kingdom: the primary response to the EU orphan works Directive was the Enterprise and Regulatory Reform (ERR) Act, introduced in 2013. The ERR provides the Secretary of State with a power to introduce two separate measures: an orphan works licensing scheme for the licensing of individual orphan works and to consider applications from collecting societies for voluntary extended collective licensing (ECL) in the UK. Both ECL and the orphan works scheme will be subject to certain safeguards set out in the ERR Act and in the corresponding implementing regulations which are being developed with a cross-section of stakeholders to be consulted. The key features of the UK implementation of the Directive are likely to include: provisions for diligent search, creation of an authorizing body, development of an orphan works registry and specific provisions governing the granting of licences.

Finland: the Government Bill on the amendment of the Copyright Act and the making of an Act on the use of orphan works (www.eduskunta.fi) was tabled before the Finnish parliament in June 2013. The new Act will enter into force in October 2014.

Spain: a bill was tabled before the Parliament to transpose the orphan works Directive into Spanish legal order, through changes to its Copyright Act that also include other measures to facilitate digitisation or online accessibility of specified copyrighted material in particular circumstances (e.g. education, press).

Sweden: a ministerial memorandum (Ds 2013:63) with a proposed bill for transposing the orphan works Directive by amending the Copyright Act is currently in the consultation process (enter into force expected by October 2014). The proposal implies that sources to be used for diligent searches will not themselves be specified in the Copyright Act, but by reference to enforcement regulations.

Romania: a bill to amend the Copyright Act was approved by the Senate on 25 September 2012, which among other things defines orphan works and sets up a national registry of orphan works, but is still pending approval of the Chamber of Deputies.

Czech Republic: a bill to amend the 2000 Copyright Act with a mandatory copyright exception for the use of orphan works and phonograms was submitted to the Czech Parliament in April 2013 and discussed at first reading. However, in view of dissolution of the lower house of the Parliament end August and new elections end October 2013, the proposal will depend on the establishment of a new Chamber of Deputies and Government and its approval is expected in the course of 2014.

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Poland: a bill to transpose the orphan works Directive by amending the Copyright Act is being prepared. A two layer regime is being considered: one regarding a catalogue of works specified in and governed by the orphan works Directive, another governing the use of orphan works beyond the framework established by the Directive. In the first case, the effects of granting the orphan work status will extend to all EU countries through the mutual recognition provided by the Directive and, in the second case, the effects will be limited to the Polish territory. It is to be implemented in October 2014.

The Netherlands: the Dutch Ministries of Justice and of Culture are currently working on implementing the orphan works Directive into national law and practice. Part of the implementation process consists of creating a list of sources and a national contact point.

Austria: In the framework of a wider discussion about modernization of Austrian copyright law, the Ministry of Justice presented a first informal draft for the implementation of the orphan works Directive in December 2012. However, the decision was taken to postpone the work on the implementation of the Directive to the next legislative period starting in autumn 2013, thus a draft law implementing the Directive might be sent out for public consultation in spring 2014.

France: preparations for the transposition of the Directive are under way with the involvement of the Conseil Supérieur de la Propriété Littéraire et Artistique (CSPLA). An expert has been assigned by the Ministry of Culture and Communication the mission of preparing the drafting of the transposition measures of the orphan works Directive in the form of a report to be submitted in June 2014. The report should also examine the articulation of the proposed provisions with the legal regime adopted in 2012 for the digital exploitation of out-of-commerce books, which also introduces in the French Copyright Act the definition of orphan work.

Estonia: the Ministry of Justice is at the moment transposing the orphan works Directive. The stakeholder dialogue started in summer 2013, initial responses were received in August 2013 and a round-table to discuss the pending issues was conducted in September 2013. Some matters of the future system still need political acceptance.

Denmark: legislation implementing the orphan work Directive is planned to be proposed to the Danish Parliament by end of January 2014.

Slovenia: the legislative process to implement the orphan works Directive is expected to start at the end of 2013 or early 2014. Still no firm idea on how the Directive will be implemented. One possible approach is to implement the copyright exception for the permitted uses of orphan works through changes in the Copyright Act and implement the technical part (appropriate sources for diligent search, fair compensation, etc.) in legal acts governing the organization and action of the beneficiaries of the exception, such as the Cultural Heritage Protection Act, the Librarianship Act, the Protection of Documents and Archives and Archival Institutions Act or the radio and Television Corporation of Slovenia Act.

Latvia: The national consultations on the transposition of the orphan works Directive and the drafting process of the respective amendments to the copyright law have been initiated. It is planned to submit the draft amendments to the government in the near future.

Malta: The Office responsible for Intellectual property in Malta (Commerce Department) is working on the draft legal notice which will transpose the orphan works Directive into national legislation by October 2014.
3.2 Legal conditions underpinning digitisation of out-of-commerce works

More than two years after the Recommendation and of the Memorandum of Understanding on Out-of-Commerce Works\textsuperscript{27}, only two Member States (DE\textsuperscript{28} and FR\textsuperscript{29}) have already adopted legislation to underpin licensing mechanisms identified and agreed by stakeholders for the large-scale digitisation and cross-border accessibility of out-of-commerce works. In addition, extended collective licensing (ECL) systems are also used in Denmark, Finland, Iceland, Norway, Sweden\textsuperscript{30} and Hungary.

This means that eight countries already provide for some mechanism to facilitate digitisation and online accessibility of works which are out-of-commerce. However, several Member States (e.g. CZ, LU, NL and PL) are considering whether to introduce amendments to their copyright legislation to allow extended collective management of rights for the digitisation and making available of out-of-commerce works, sometimes in conjunction with the transposition of the orphan works Directive. One country (UK) introduced in 2013 empowering legislation to consider applications from collecting societies for voluntary extended collective licensing, whose implementing regulations are being developed in consultation with a cross-sector of stakeholders.

Beyond the extended collective licensing schemes, mainly in use in the Nordic countries for specific purposes and uses, the legal tool normally used to enable mass-digitisation takes the form either of mandatory collective management or a legal presumption of representation by collective management organisations of the non-represented holders of the exclusive rights to reproduce/make available a bulk of specified works, which would otherwise require individual clearance. It normally applies to works of a particular sector (e.g. books or print material), published in the country concerned before a specified cut-off date and which are not or no longer commercially available.

One Member State (LT) reported projects for the digitisation and digital accessibility of copyrighted works for the blind and visually impaired people, including format-shifting from obsolete formats, on the basis of their specific copyright exemption for such cases. Another Member State (SE) reported that they are considering extending their copyright exception for preservation purposes, now only applicable to libraries and archives, to museums as well.


\textsuperscript{28} Law of 27 June 2013 on the use of orphan and out-of-commerce works and further changes to the © Act: \url{http://www.bundesgerichtshof.de/SharedDocs/Downloads/DE/Bibliothek/Gesetzesmaterialien/17_wp/UrheberR_verwaiste_Werke_BReg/bgbl.pdf?__blob=publicationFile}.

\textsuperscript{29} Law n° 2012-287 of 1\textsuperscript{st} March 2012 on the digital exploitation of out-of-commerce books of the 20\textsuperscript{th} century: \url{http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000025422700&categorieLien=id}.

France: Law 2012-287 of 1 March 2012 on the digital exploitation of out-of-commerce books of the 20th century establishes mandatory collective management of digital exploitation rights on books published in France before 1st January 2001 and no longer commercially available (over 500,000 books), if right-holders do not opt out of the scheme within the periods specifically provided therein. A collective management organization with equal participation of authors and publishers (Sofia) will grant, on behalf of rights holders, the necessary licences for their digitisation, online availability and commercial exploitation, and pay rightholders, thus enabling the digital exploitation of books no longer in commerce without a case-by-case scrutiny of each publishing contract. The law also sets up a register of digitally re-published out-of-commerce books called ReLire (http://relire.bnf.fr/) and charges the French National Library (BnF) with the mission of creating and maintaining a freely accessible online database of 20th century out-of-commerce books, updated once a year.

Germany: Law of 27 June 2013 on the use of orphan and out-of-print works sets up a legal presumption in favour of collective management organisations (VG Wort and VG Bildkunst) for the licensing of the reproduction and make available rights on books published before 1st January 1966, which are no longer commercially available, if there is no opposition by the right-holders after 6 weeks of the work being put on the Registry of Out-of-Commerce Works run by the German Patent and Trade Mark Office.

Finland: Several general solutions under the provisions of the Finnish Copyright Act are applicable to the use of out-of-commerce works, and diminish the need for a specific solution on them. Firstly, some provisions on copyright limitations that cover relevant areas of uses where the repertoire contains out-of-commerce works. Secondly, a number of provisions on extended collective licences that are applicable on all kinds of works in the collections of archives, libraries and museums, including orphan and out-of-commerce works. The system is in line with the Memorandum on the use of out-of-commerce works from September 2011 (http://ec.europa.eu/internal_market/copyright/out-of-commerce/index_en.htm).

The Netherlands: Currently, cultural heritage institutions, collective management organisations and the government are discussing the needs and possibilities of introducing extended collective licensing (ECL) in the law, given that the diligent search per work prescribed in the Directive is unfeasible for large-scale digitisation. In the Netherlands, ECL-like contracts are already being concluded by way of self-regulation, but these do not provide legal security for lack of a legal basis.

Luxembourg: No decision was taken whether alternative rights clearance mechanisms will be considered such as those based on the MoU on Out-of-commerce works or extended collective licensing or other schemes. The National Library however is strongly in favour of such alternative rights clearance.
Poland: according to the Ministry of Culture and national Heritage, introduction of regulations on out-of-commerce is required to allow the use of such works with legal certainty. The solution should lead to increased legal access to books and press releases no longer in circulation. Publishers and authors are encouraged to verify which titles no longer in circulation are still attractive to readers, without prejudice to regulating the out-of-commerce works in conjunction with the amendment of the Copyright and Related Rights Act regarding orphan works.

Hungary: Mass digitisation and cross-border accessibility are assisted by the institution of the collective management of copyright in Hungarian copyright regulations. Copyright collectives deal with such uses which involve mass and simultaneous access. This is partly mandatory by law, partly voluntary.

United Kingdom: there are no current legal or voluntary stakeholder-driven schemes to underpin large-scale digitisation and cross-border accessibility. Earlier efforts towards collective licensing scheme for this purpose failed on the basis of affordability.

3.3 Databases of rights information

Twelve Member States (BE, CY, CZ, DE, HU, IT, LU, LT, LV, NL, PT and SK) reported their contribution to or promotion of availability of databases with rights information, normally in the form of participation or contributing to the ARROW database or in conjunction with the implementation of orphan works or out-of-commerce legislation, which both require the setting up of databases of works with the specified status and the corresponding rights.

Q. 6.3 Contribution to databases of rights information such as ARROW?

Germany: Germany has been one of the major contributors to the ARROW project. The Deutsche Digitale Bibliothek has been tasked by the federal Ministry of Justice to negotiate with collecting societies, such as VG Wort or the VG Bildkunst, regarding the Internet use of copyrighted digitised material. This includes a close coordination with the European partners. In connection with practical implementation of the orphan works Directive database of orphan works hosted by the OHIM, relevant stakeholders are discussing the proposed workflow organization. For books, a solution has been proposed, based on the existing data infrastructure which makes use of authorized data records provided by the German National Library.

Belgium: The Royal Library contributes to the ARROW Plus project in Belgium in cooperation with "La Maison des Auteurs – Het huis van de auteurs" and "boek.be". The Royal Library provides the Belgium National Bibliography. The launch of the ARROW Plus database is foreseen for 2013.
Portugal: The National Library of Portugal bibliographic data is available through NLP XML repositories (http://repox.bn.pt/; http://urn.bn.pt) that are specifically provided to ARROW partners via TEL.

Czech Republic: the National Film Archive, Library (NFA) is part of the FORWARD project (framework for audiovisual orphan works and EU-wide registers), co-funded by the EU to facilitate automated searches for rights on audiovisual material at European level.

Luxembourg: Luxembourg is contributing library catalogues to the European Library database.

Italy: ICCU (Istituto Centrale per il Catalogo Unico) was a partner for the dissemination of the ARROW Plus project and participated to the validation of Italian data. It is also the national contact point for ARROW and coordinator of the participation of the Italian libraries. ICCU will be an ordinary member of the ARROW Association that is on the making (?). In December 2011, ICCU organised in Rome the national meeting of the Italian ARROW stakeholders; national libraries, DG for libraries, the Central Institute for Cataloguing and Documentation (ICCD) of MiBACT, the Italian Publishers Association (AIE), the Federation of European Publishers, the Italian Presidency of the Council of Ministries, the Italian Library Association, etc.

Lithuania: The ministry of Culture and the Martynas Mažvydas National Library participate in the creation of a prototype of the database of EU orphan works that is being implemented by the Office for the Harmonisation in the Internal Market.

Hungary: Searches in VIAF (Virtual International Authority Files) and ARROW (Accessible Registries of Rights Information and Orphan Works) are expressly listed in the new government decree among the rules of how to search for copyright holders in case of orphan works, thus supporting the awareness of these databases and their use. The National Széchényi Library took part in the implementation of the ARROW project in Hungary, is a data provider of ARROW via VIAF and TEL, and contributed to uploading data to one of its components (the Books in Print database) and its subsequent testing. When planning the rights clearance component of ELDORADO, the operation principle of ARROW was taken into account. Within the ELDORADO system ARROW is named as one of the most significant sources of copyright data and compatibility with ARROW constituted a major functional requirement.

Cyprus: the Cyprus Library created awareness of ARROW and other databases among memory institutions under its participation in the Europeana Awareness project.

Latvia: The Latvian Book Guild (Latvijas Grāmatnieku ģilde) is the contracting partner in ARROW Plus. The national Library catalogue is connected to the ARROW system via the European Library (TEL) since 2012. Also the Books in Print (BiP) database has been created and connected to the ARROW system.

Slovak Republic: ARROW is becoming part of the national legislation (with the transposition of the orphan works Directive) as it will be mentioned in the copyright law as one of the primary sources to be checked when performing diligent searches.

4. EUROPEANA
Europeana has succeeded in reaching its quantitative targets, but less so as regards masterpieces. The number of digital objects increased significantly over the reporting period, exceeding the 2015 30 m target ahead of schedule. Member States have different levels of progress; however, several countries have contributed significantly, already reaching or even exceeding their indicative targets for 2015, as set out at Annex II of the Recommendation, ahead of plan. Progress regarding the sound or audiovisual material targets has been slower, but it is expected that the target will be reached through ongoing national or EU-funded projects.

Other positive trends are improved cultural institutions engagement, through e.g. national aggregators as well as cross-border aggregators established by EU-funded projects. Twenty three Member States reported having set up national, cross-domain or domain-specific, aggregators. Aggregators also ensure the interoperability of cultural institutions’ metadata with the standards defined by Europeana. This has naturally spill-over effects and benefits at national level.

Several Member States highlight their commitment and initiatives to encourage institutions to make publicly funded digitised material available in Europeana, though only four have made this a condition for public funding. Similarly, several countries report initiatives to help make prominent material available, though only few cases of specific collections were indicated, while often the concept of ‘masterpieces’ was challenged. Progress needs to be made in bringing qualitative collections and premium content from leading museums to Europeana.

The signature of the Europeana Data Exchange Agreement has had positive effects on the wider availability of open metadata through CC0 licences31. There is also a growing trend for opening up metadata for re-use at national level, for example through APIs. Despite this trend, limited experience of re-use [or even demand for such metadata] was reported.

Increased awareness of Europeana among the general public and notably in schools has been achieved through dedicated PR actions/campaigns and Collection Days around European landmark events like the WW1 centenary (Europeana 1914-1918), mainly led by Europeana.

Point 7 of the Recommendation invites Member States to contribute to the further development of Europeana by:

(a) encouraging cultural institutions as well as publishers and other rightholders to make their digitised material accessible through Europeana, thus helping the platform to give direct access to 30 million digitised objects by 2015, including two million sound or audiovisual objects;

(b) making all public funding for future digitisation projects conditional on the accessibility of the digitised material through Europeana;

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31 Creative Commons dedication to the public domain.
(c) ensuring that all their public domain masterpieces will be accessible through Europeana by 2015;

(d) setting up or reinforcing national aggregators bringing content from different domains into Europeana, and contributing to cross-border aggregators in specific domains or for specific topics, which may bring about economies of scale;

(e) ensuring the use of common digitisation standards defined by Europeana in collaboration with the cultural institutions in order to achieve interoperability of the digitised material at European level, as well as the systematic use of permanent identifiers;

(f) ensuring the wide and free availability of existing metadata (descriptions of digital objects) produced by cultural institutions, for reuse through services such as Europeana and for innovative applications;

(g) establishing a communication plan to raise awareness of Europeana among the general public and notably in schools, in collaboration with the cultural institutions contributing content to the site;

4.1 Increase in content contribution

Currently (September 2014), Europeana provides access to over 33 million digitised objects, having already reached 30 million objects in November 2013, two years ahead of the 2015 target. Several countries have contributed significantly to this, already reaching or even exceeding their indicative targets for 2015, as set out at Annex II of the Recommendation, ahead of plan. However, Member States have different levels of progress. Table 1 provides details of the current situation, as regards the number of items currently accessible on Europeana and the percentage of the requested contribution reached up to now by the Member States. While nine MS have already contributed up to 8 times the requested additional items (120%-830%), six MS have contributed less than 20% of the requested additional items, and Slovenia stands below the 2011 number of items (which may be linked to the introduction of the Europeana Data Exchange Agreement, that requires the release of metadata under the CC0 license, such as in the case of Italy where it led to the removal of 600,000 metadata records from Europeana).

The target of two million sound or audio-visual objects by 2015 still has to be reached. At the moment Europeana provides access to 730,000 sound or audio-visual objects. However, the situation is likely to improve thanks to two EU-funded projects (EUScreenXL and EuropeanaSounds) expected to contribute metadata for over 1.5 million audio-visual objects by the end of 2016.

Most Member States (twenty-three) report initiatives concerning how they encourage cultural institutions, publishers and other rights-holders to make digitised material accessible through Europeana:

- Raising awareness about Europeana and encouraging participation through conferences, events and campaigns (NL, PL, CY, LV), platforms with information and documentation about participation (NL, BE, LT), and by promoting Europeana as a benefit to the cultural heritage institutions (BE, UK)
- National aggregation initiatives (DE, SE, FI, NL, CZ, PT, BE, AT, IT, MT, UK, HU, SK) that channel /provide digitised material into Europeana as well.
- Participation in Europeana projects and in projects' dissemination activities (SE, FI, EE, BE, GR, LU, PL, RO)
- Mandatory sharing of resources in Europeana for digitisation projects funded by Ministries (AT, ES, PL, SK)
- Funding of specific projects (SI, AT, GR)
Spain reports an initiative specifically related to publishers:

**Spain**: The DG for the DG for Fine Arts and Cultural Assets and Archives and Libraries signed an agreement with ARCE (Association of Spanish Cultural Magazines) in 2011 in order to digitise and make available cultural magazines through Europeana. Already 21 current cultural magazines have been digitised and are part of Europeana. Likewise, agreements have been signed with rightsholders of some newspapers.

Austria, France, Germany and Latvia report national initiatives specific to the contribution of sound or audio-visual material. In addition, France, Italy, Poland and the UK mention the contribution of audiovisual material through their institutions’ participation to EU projects such as Europeana Sounds and EUScreenXL.

**Austria**: The BMUKK commissioned the Austrian Mediathek with a comprehensive project for digitising audiovisual material: “Österreich am Wort” with about 7.400 audio and video 11 sources and 10 web-exhibition.

**France [translation]**: Through a PPP with Memnon Archiving Services and Believe Digital, BnF will digitise a large part of its sound archive, for conservation as well as distribution to all audiences. The collection contains approximately 180,000 records published between 1900 and 1962 (135,000 78s, 45,000 rpm disks 45 or 33) corresponding to approximately 700,000 titles.

**Germany**: A significant part of the funds distributed by the “Digitalisierungsoffensive” (Digitisation Effort) has been earmarked for the digitisation of film material. The integration of the results into the DDB was a condition for receiving funding, hopefully increasing contributions to Europeana as well.

**Latvia**: Culture Information Systems Centre has started negotiations with the Latvian Television and the Latvian Radio to explore possibilities of making the material that will be digitised within a project “Ensuring the digital availability of Latvian audio-visual material” accessible through Europeana.

### 4.2 Accessibility through Europeana as a condition for public funding

Four Member States (AT, PL, SK, ES) report having set accessibility through Europeana as a condition for public funding.
Austria: For projects commissioned by the BMUKK [Austrian Federal Ministry for Education, the Arts and Culture] integration in Europeana should be provided.

Poland: The terms of digitisation funding programs - such as the "Multi-Annual Programme Culture+, Digitisation Priority", the Programme of the National Audiovisual Institute "Digital Heritage", the Minister's Programme "Protection and Digitisation of Cultural Heritage" – include provisions obliging the beneficiaries to share the digital resources, including via Europeana. In assessing the proposals, extra points were awarded for sharing digitised resources via Europeana.

Slovakia: Making digitised material accessible through the presentational system developed within this project, and thus through Europeana, was a pre-condition for approval of any digitisation project funded from the EU Structural Funds.

Spain: For Libraries, contribution to Europeana is a mandatory requirement in calls for funding digitisation projects.

Fourteen Member States (NL, DE, BE, CZ, EE, GR, IT, LT, LU, LV, SI, FI, SE, UK) report no such conditions. However, several highlight their commitment and initiatives to support Europeana and to make available digitised material, especially publicly funded.

Germany: The DDB has committed itself in its foundation charter to work actively on making material from the publicly funded cultural heritage institutions available through Europeana.

France: Cultural organizations that receive public funding for digitisation are encouraged to contribute to Europeana.

Finland: The Ministry of Education and Culture encourages the organisations to make objects of wider interest accessible through Europeana.

Greece: Calls for Proposals include the requirement that all material being digitised and annotated follows the metadata schemata used in Europeana, so that it can be contributed to Europeana.

Latvia: It is expected that as a part of implementation of Digital Cultural Heritage Development Strategy all the content digitised by means of public funding will be identified and gradually made available through Europeana.

Luxembourg: No specific measures have been taken but it is taken as a given that all digitised content will be made available via Europeana.
UK: No measures have been put in place to make contributions to Europeana a condition of funding. Instead, some conditions have been created requiring funded projects (notably through the Heritage Lottery Fund) to make digital content freely available for distribution and re-use. These conditions are broadly compatible with the requirements of the Europeana Data Exchange Agreement.

4.3 Public domain masterpieces in Europeana

Four countries (LV, HU, BE, DE) report initiatives to make national masterpieces accessible through Europeana. Most Member States report that selection of material is up to the cultural institutions (eg AT, FI, BE, GR, IT) and that, overall, large scale digitisation will help bring national masterpieces in Europeana (eg. FI, DE, SE, GR, SK). Several reports point out issues as regards the concept of "masterpieces" (eg. DE, BE, SE, IT, LT).

Specific indicators for measuring progress in bringing public domain masterpieces in Europeana were not reported by any of the Members States.

Q 7.3 Measures to ensure that public domain masterpieces will be accessible through Europeana by 2015?

Latvia and Hungary report the existence of established catalogues of national treasures, most of them already digitised, which will be made available through Europeana by 2015:

**Latvia:** Latvian masterpieces are defined and described in the Latvian Cultural Canon (http://kulturaskanons.lv/en/1/). At the moment it consists of 99 cultural treasures in seven areas (Architecture and Design, Cinema, Literature, Music, Stage Art, National Traditions, Visual Arts). Most of the public domain masterpieces included in the Cultural Canon have been digitised and by 2015 all the public domain masterpieces will be made available through Europeana.

**Hungary:** A Hungaricum Committee operating under the Ministry of Rural Development performs the registry of the National Values and Hungaricums. MaNDA archives the collection of Hungaricums digitally and ensures their accessibility on the internet via its database. The national priorities collected this way appear on the interface of the Europeana supplied with metadata.

Belgium and Germany report similar initiatives in the form of dedicated projects:

**Belgium:** “Trésors de la Communauté française” (the masterpieces of the cultural heritage of the French Community of Belgium, designated as such under the Decree of 11 July 2002). The digitisation will occur in 2014-2015

**Germany:** “100 Bände Klassik” (100 volumes of classical literature): the German National Library has digitised 100 German literary masterpieces which are accessible through Europeana.
Several countries agree that, overall, large scale digitisation will help bring masterpieces in Europeana:

**Finland**: The expertise of the institutions, and the variety and the vast amount of objects in their collections will guarantee that the most relevant digital cultural materials in public domain will be available through Europeana.

**Germany**: The ever growing digitisation efforts will surely include a great number of masterpieces. Many if not most of them will be included in Europeana as well.

**Sweden**: However, key cultural or historical public domain works and objects that could be described as the masterpieces are going to be digitised together with the other content. It is not possible to specify how many such objects will be provided to Europeana in 2012-2015.

**Greece**: All accepted projects assume that the masterpieces (or highlights) are the first to be digitised and included in the outcomes for dissemination.

**Slovakia**: Public domain masterpieces are largely included in the [national] digitisation projects, i.e. they will be made available through Europeana by 2015.

Besides, several reports comment on the definition of "masterpieces":

**Germany**: Not easy to come to a comprehensive definition of what exactly belongs in the category “public domain masterpiece”.

**Belgium**: The definition of masterpieces is difficult to establish and of limited use.

**Sweden**: Cultural heritage institutions in Sweden today do not use definition of “masterpieces” in their work.

**Italy**: The concept of masterpieces is not subjected to a specific definition: the Botticelli Venus is undoubtedly a worldwide known masterpiece, but also an illuminated manuscript of a local library can be a masterwork and have a great relevance in a narrower territory.

4.4 National and cross-border aggregators

**National aggregators**

At least one national aggregator is reported by twenty four Member States. In eighteen Member States (NL, DE, SI, EE, FI, SE, AT, DK, ES, IT, LT, MT, PL, UK, RO, CY, HU, BE, SK) aggregators bring together content from different domains. In five Member States (CZ, FR, GR, LV, PT) there are several initiatives, each serving as an aggregator for a specific domain.

**Q. 7.4 National aggregator bringing content from different domains into Europeana?**

- YES: 24
- NO: 1
- N.A.: 7
The maturity of the aggregators varies. Some are well established (eg. AT, IT, ES, SE), some have launched more recently (eg. DE, HU, NL) and others are still at the start phase (eg. CY, GR, RO). The size of aggregators (number of contributing institutions, number of digital objects) also varies. For example, the reported number of contributing institutions ranges from 3 (CY) to 10 (LT) to more than 100 (HU, PL, ES, UK) and the number of digital objects ranges from the thousands to over 1 million (ES, IT, PL, UK).

Luxembourg, currently contributing content to Europeana through EU funded projects, highlights the need for a national aggregator:

**Luxembourg:** Organisations are also informed by their participation in Europeana projects specific to their domains and are using the respective domain aggregators to add data to Europeana. The lack of a national aggregator will be pronounced if these projects should end.

**Cross-border aggregators**

Most Member States report participation of their institutions in cross-border aggregators, in specific domains or for specific topics, such as the European Library or the Europeana group of projects, funded by the CIP-ICT-PSP and eContentPlus programmes. Several examples of such projects were reported, including: Linked Heritage, APEX, Europeana Fashion, Europeana Inside, Partage Plus, 3D Icons, Athena Plus, Europeana Newspapers, Europeana Travel, European Film Gateway, Carare, HOPE, OpenUp!, Europeana Sounds, Ambrosia. Another reported initiative, by the Czech Republic, is the Manuscriptorium European digital library of manuscripts: The Manuscriptorium digital library is Europeana’s international aggregator for manuscripts and old prints (http://www.manuscriptorium.eu) – more than 120 collections from about 25 mostly European countries; about 76% of the aggregated content comes from abroad.

In general, institutions’ participation in cross-domain aggregators is not regulated. However, Belgium reports an initiative by the Flemish Government to stimulate the subsidised cultural heritage institutions to participate in Europeana projects by providing matching funds since 2010. Examples of participants’ motivation include:

**Netherlands:** The cultural institutions give several reasons for participating in such projects: Exchange of knowledge & expertise; Building a European network of experts; To ensure the leading role for the Netherlands within this field.

**Luxembourg:** The motivation is to expose and enrich the organisations’ content to larger audiences and contribute to the professional development internally.

4.5 Use of Europeana metadata standards and permanent identifiers

**Use of metadata standards defined by Europeana**

Several countries report the development and promotion of guidelines for digitisation, including standardized metadata formats and controlled vocabularies, which are followed by cultural institutions when implementing digitisation projects. It is reported in some cases (BE, ES) that major institutions use the metadata standards defined and used by Europeana (EDM or ESE). However, in most of the cases (BE, DE, CZ, FI, PL, IT, MT, RO, UK, HU, LV) it is the aggregators (national, domain or thematic/projects) that ensure that metadata from cultural institutions following different standards are mapped and transformed into a Europeana compatible format (EDM or ESE) and are overall compliant to the Europeana technical requirements. The National Technical University of Athens in Greece has also implemented the MINT platform for metadata interoperability, in the framework of
the CIP-ICT-PSP and eContentPlus programmes, which has been deployed by almost 20 projects aggregating material for Europeana, as well as by the Europeana Office in their ingestion procedures.

Q. 7.5 Use of common digitisation standards defined by Europeana encouraged?

Germany: Regarding the metadata of digitised objects the Deutsche Digitale Bibliothek has formulated rules for the most common metadata formats (METS/MODS, Dublin Core, EAD, LIDO etc.) and ensures that they will be mapped to the Europeana Data Model.

Belgium: The major institutions (Federal and in the Communities) are indeed using the international standards, including Europeana’s Semantic Elements (ESE) and Europeana Data Model (EDM). The Internet cultural portal will make crosswalks between institutions metadata schemes and ESE for Europeana.

Finland: The National Board of Antiquities has made guidelines for digitalization for Finnish museums. Due to the National Digital Library (NDL) project, the use of shared standards and persistent identifiers is actively promoted.

Lithuania: A List of general and specific standards and normative documents to be applied by institutions implementing digitisation projects was drawn up in 2010. These are consistent or compatible with the standards applied by Europeana.

Slovenia: NUK serves as a digitisation coordinator on a national level and provides technical specifications and quality assurance for digitisation projects carried out by other libraries and heritage institutions.

Spain: To the extent that materials digitised with public funding must contribute to Europeana, the implementation of EDM is mandatory for funded institutions.

Poland: The Competence Centres for digitisation established by the Minister of Culture and National Heritage developed a set of best practices and standards for digitisation. The Poznań Supercomputing and Networking Center (PSNC), as a founding member of European IMPACT Competence Center in mass digitisation (http://digitisation.eu), promotes use of international digitisation standards related both to content and metadata.

Slovakia: Publicly funded digitisation projects have to implement defined standards, that are compatible with the standards defined by Europeana.

Poland and Romania report additional, ongoing, work to extend Europeana’s EDM standard:

Poland: In the current year, a group of experts is involved in working out an optimal solution for the selection and implementation of metadata schemes, translating the LIDO scheme and developing rules for creating unique identifiers. These activities are in line with the recommendations promoted by Europeana.
**Romania:** We, as a national aggregator, disseminated the LIDO and EDM formats. Work in progress: the development of an extension of the EDM ontology to suit the specific needs of the Romanian institutions and to preserve the original granularity of the provider’s metadata while mapping smoothly to EDM.

**Use of Persistent Identifiers (PIDs)**

Several Member States report using persistent identifiers, most commonly the URN system by libraries, but in general there is no systematic support for PIDs at national level. As pointed out in UK's report, "the primary obstacle with PIDs is that each domain or community produces its own standards and protocols for persistent identification, meaning that there is relatively little cross-domain portability of approaches".

**Netherlands:** There are several Dutch Persistent Identifier infrastructures emerging or already available to ensure sustainable links to data and metadata: The URN:NBN infrastructure is used to reference publications and datasets; EPIC (Handle System) is used to reference all sorts of digital objects; Increasingly Datacite is being used as well. Next to referencing objects, infrastructures are also being used to create opportunities to use identifiers for persons, such as the DAI (Digital Author Identifier).

**Germany:** The German National Library operates a URN resolver that is available to public and/or scientific institution and publishing houses. Also, institutions that want to contribute to the Deutsche Digitale Bibliothek need to provide persistent identifiers for their digital objects. However, a cross-domain URN service remains very much in demand.

**Portugal:** The National Library of Portugal systematically uses uniform persistent identifiers for its digital objects and metadata records.

**Slovenia:** Uniform Persistent identifiers (URN) are used for all materials available through the Digital Library of Slovenia portal. As all digitised material from other libraries is also available through the portal, the use of persistent identifiers is ensured.

**Estonia:** All systems use permanent links and PIDs but only within the limits of the system.

**Finland:** The National Library maintains a URN resolver at [http://urn.fi](http://urn.fi). The service is used not only by libraries, but also by other organizations. In addition to URNs, Handles are also commonly used as internal PIDs in DSpace systems. Permanent identifiers are in test use in some Finnish museums.

**Latvia:** The National Digital Library System is based on the EDM and uses permanent identifiers.

**Poland:** The Polish Digital Libraries Federation, operated by the Poznań Supercomputing and Networking Center (PSNC), supports persistent identifiers since the beginning (2007). Each item aggregated by PSNC gets persistent identifier and persistent URL and such URL is then passed to Europeana. Additionally PSNC cooperates currently with the National Institute of Museology and Collections Protection on establishing a dedicated country-wide persistent identifiers system for all museum objects.

**Slovakia:** Implementation of urn:nbn is a precondition for approval for funding in all the above mentioned digitisation projects.

**UK:** The systematic use of permanent identifiers has been recommended good practice for a number of years now. The primary obstacle with these is that each domain or community produces its own standards and protocols for persistent identification, meaning that there is relatively little cross-domain portability of approaches. All digital content provided to the Culture Grid is transformed into a Europeana Data Model-compatible format and assigned permanent identifiers based on an internal protocol. Thus far, the costs associated with maintaining a domain registry of digital identifiers have proved prohibitive.
4.6 Freeing metadata for re-use

There is growing level of support for open, free metadata reported by the Member States, and a growing trend to open up metadata for re-use at national level, for example, through APIs. Ten countries (AT, DE, EE, FI, FR, GR, IT, PL, NL, UK) have reported measures towards this end.

Q. 7.6 Measures taken to ensure wide and free availability of metadata?

![Pie chart showing measures]

Netherlands: The major cultural institutions in the Netherlands, such as the KB, the National Archives and the National Agency for Cultural Heritage support the take up of open data and make their metadata available with CC0-licenses, unless copyright, licensing agreements of privacy issues do not allow that. Opening up metadata through standardization and harmonization of semantic relationships is a standard issue in most of the digital projects in the Netherlands. E.g. in the government funded project Erfgoed&Locatie (Heritage & Location) archives, libraries, museums and creative partners work together to standardize and open up location based heritage. Another large scale project in this area is SEALinc (Socially-enriched access to linked cultural media).

Estonia: The Ministry of Culture is currently in the process of creating a digital repository for museums and an open data portal module that makes museums’ metadata freely accessible.

Poland: all data aggregated by the Federation (currently over 1.5M of metadata records) is available via open APIs: http://fbc.pionier.net.pl/pro/wspolpraca/api/.

UK: There has been a significant shift away from providing data to specific points of aggregation and towards the implementation of API which make the data accessible to a wide range of different platforms and services. Hence, instead of making legacy metadata specifically available for Europeana, cultural heritage institutions have elected to make it available for a range of uses, which may include Europeana.

Major institutions and aggregators have signed the Europeana Data Exchange Agreement (DEA). This, in some cases, is reported to have been very positive for the promotion of open data at national level:

Finland: NDL will open its metadata in 2014. Part of that metadata is already aggregated to Europeana as CC0. The Europeana DEA was actively discussed in Finland when CC0 was proposed to content providers and that process was very valuable for the development of open cultural heritage data in Finland.

Germany: The Europeana Data Exchange Agreement served as a model for the contract between the Deutsche Digitale Bibliothek and its content providers. In general, it has been readily accepted, and the majority of institutions taking part in the DDB have agreed to deliver metadata under CC0-licences.
However, there have been cases where the take-up of the DEA has been more difficult, occasionally leading to the removal of metadata elements or even of whole metadata records:

**Austria:** Most cultural institutions were not aware that the re-use of their material can bring benefits also for their own institution (new target groups, etc). Much persuasion was needed to convince some of the participating institutions.

**Belgium:** The forced introduction of the DEA was perceived as being undemocratic by many (if not most) content providers. By making the signing of the DEA mandatory, some content providers limited the metadata they provided to Europeana, resulting in the impoverishment of the available metadata through Europeana. The main reason cited for limiting the metadata being the investment made by content contributors to conceive this metadata. Signing the DEA doesn’t allow attribution to the content provider, so the link with the content provider is lost. The DEA reduced the existing support for the Europeana project by cultural heritage institutions.

**France:** The Ministry of Culture and Communication (MCC) cannot commit to delivering metadata for which it is not the producer under a CC0 license. Some datasets were removed. The BnF has accepted the DEA for metadata in Dublin Core format. For its metadata in MARC format, that are richer, the license is Etalab (of type CC0-BY-SA).

**Germany:** However, in some cases German cultural heritage institutions are rather reluctant regarding the use of CC0-licences for their metadata. Especially museums, who often provide detailed description texts for their pieces, are often unwilling to give this information away in an open-licensed form, therefore they currently do not provide object description to Europeana. Regarding the archives sector where the conditions are quite comparable to the museum sector, the archival DDB partners raise the awareness for the subject and support the cause of CC0.

**Greece:** Many cultural institutions have signed the Europeana Data Exchange Agreement, reducing in some cases (as in the case of the Hellenic Ministry of Culture) the number of metadata elements presented to the general public.

**Italy:** This effort was generally fruitful with a single but substantial exception: the CEI, the conference of the Italian bishops, removed 600,000 records already published in Europeana when the DEA entered into force. CEI is now analysing the DEA implications in order to take a decision about it.

**Slovenia:** The libraries in Slovenia have not started yet to publish their library metadata as open data for reuse with the exception of NUK’s Europeana metadata in data hub (http://datahub.io/dv/dataset/europeana-lod)

**Poland:** The legal analysis of the draft agreement in terms of its conformity with the Act of 4 February 1994 on Copyright and Related Rights (hereinafter abbreviated to “Copyright Law”) reveals that that Article 3 paragraph 2 of the draft DEA is contrary to the provisions of the Copyright Law [...] The concept of waiver of copyright is not present in Polish law and is not provided under the Copyright Law. In the light of Polish law, it is also impossible to waive all the claims related to the exercise of the rights. Any such provisions are null and void in Polish law.

**Experience of re-use of free metadata**

Limited experience of re-use was reported, mostly apps developed in Hackathon events.

**Luxembourg:** This change has mostly benefitted the sector internally, as new international interoperability with Creative Commons Zero as a new metadata licensing standard has
triggered a global wave of shared, cloud based innovation in the library sector, including library systems businesses.

**Poland:** PSNC and Kornik Library in 2011 and PSNC and NiNA in 2012 organized two editions of Hack4Europe hackathons, in cooperation with Europeana Foundation. Another case of re-use of open cultural data is a CHContext widget developed by PSNC and released as open source: [https://github.com/psnc-dl/chcontext](https://github.com/psnc-dl/chcontext)

**Latvia:** There currently are no cases of re-use of Europeana content in Latvia, apart from applications developed during the Europeana hackathon held in Riga in 2011, none of which is developed as a completed product after the event.

**Hungary:** An ongoing pilot project relying on this database is the Cultural GPS, a smartphone optimised geographical information system in which cultural heritage data elements appear related to geographic locations or settlements.

### 4.7 Raising awareness of Europeana among the general public

Twelve Member States refer to their participation in the EU-funded project Europeana Awareness and to organising various events in the framework of the project. Key campaigns include the "Collection Days"[^32] targeting the general public, as well as campaigns targeting schools.

Collection Days, under the 1914-1918 theme (BE, SI, DK, IT, SK) or the 1989 theme (LT, LV, PL).

**Belgium:** Five "collection days" for the "Great War Archive" project were organized in Flanders in 2012-2013 – more to be organized in 2013-2014

**Italy:** Major awareness event held in Rome in May 15th, 2013 for collecting memories from the WWI period, targeted both to the wide public and to researchers: a technical seminar about the use of historical source texts was held in parallel to the memory collection.

**Lithuania:** On 9-13 August 2013, the Martynas Mažvydas National Library of Lithuania and the Panevėžys County Public Library participated in a campaign Europeana 1989. The campaign was organised across the three Baltic States to commemorate the peaceful mass demonstration of 23 August 1989 that represented a human chain extending from Tallinn through Riga to Vilnius, against the totalitarian regime. During this campaign, the public was urged to store memorable events on digital media and reconstruct the Baltic Way on the map online, marking their exact place in the human chain on the website of the project.

[^32]: Family history roadshows when the public can bring along documents, artefacts and their stories, so they can be scanned or photographed and added to the archive.
Europeana Awareness campaigns targeting schools (FI, ES)

**Finland:** There will be the national Europeana Awareness campaign in 2014 in connection with the Media Literacy Week, coordinated by the Centre for Media Education and Audiovisual Media. The Finnish Europeana Awareness Campaign will be aimed at schools. The overall theme of the week is “let’s create a better internet.”

**Spain:** A PR campaign targeting schools is scheduled in the second term of 2014 as a part of activities involved in the Europeana Awareness project in which the MECD is participating.

Campaigns under EuropeanaRemix (PL)

**Poland:** In addition, information on the possible use of Europeana resources by teachers will be intensified under two projects NInA: Workshop 2.0 (implemented in the last quarter of 2013), Audiovisual Course (carried out jointly with the Center For Citizenship Education at the beginning of 2014). In both projects, the workshop trainers will teach how to remix Europeana resources and about the educational values of the remixes developed by students. Teachers will be encouraged to pursue activities using the Europeana resources. Both educational projects (Workshop 2.0 and Audiovisual Course) will end in 2014 with the school competition Europeana Remix.

Other activities targeting the public (NL)

**Netherlands:** Fashion edit-a-thon in collaboration with Europeana; Wiki-loves-Monuments in collaboration with Europeana; DISH (Digital Strategies for Heritage) conference in collaboration with Europeana AGM.

Other activities targeting schools and other specific user communities (PL, LV, DK, GR)

**Poland:** The Europeana resources and the concept of shared access to the whole European cultural heritage in digital form have been promoted in Poland since the beginning of the portal. In addition to standard measures such as posting links to Europeana on the websites of libraries and information about the activities of Europeana at seminars and conferences aimed at librarians, one should mention the promotional activities aimed at popularizing Europeana among Polish users. Presentation of Europeana was introduced to the programme of courses organized by the National Library, addressed among others to teachers and librarians.

**Latvia:** The National Library of Latvia collaborates with educational institutions to promote access and use of digitised materials and collections of the National Digital Library of Latvia, including an upcoming training course for school teachers. The Culture Information Systems Centre provides training and support to public libraries in order to promote the use of both National Digital Library of Latvia and Europeana.

**Denmark:** The Danish Cultural Agency organised a competition for high school students to raise awareness of Europeana - ended in February 2013.

**Greece:** There has been a large project, entitled Digital School, which aims at providing all courses in school in digital format. Within this project, an activity has been implemented, using MINT, so that cultural content digitised in Greece by different providers, with a different metadata schema, or following EDM of Europeana, is compatible with the LOM (Learning object Model) Schema used by the Digital School platform, so that it can provide about 15% of the courses’ educational material (http://photodentro.edu.gr); the current phase examines the agreement of such cultural organisations and possibly Europeana to provide such content to Digital School platform.
<table>
<thead>
<tr>
<th>Member State</th>
<th>Number of objects in Europeana per MS (October 2011)</th>
<th>Indicative Target 2015**</th>
<th>Requested contribution from 2011 to 2015 (n. of items)</th>
<th>Number of objects May 2014</th>
<th>Percentage of target number reached</th>
<th>Percentage of requested contribution reached</th>
</tr>
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<tbody>
<tr>
<td>BELGIUM</td>
<td>338,098</td>
<td>759,000</td>
<td>420,902</td>
<td>596,009</td>
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<td>31,292</td>
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<td>CZECH REP</td>
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<td>456,510</td>
<td>230,331</td>
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<td>2,325,047</td>
<td>107.63%</td>
<td>1,232,508</td>
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<td>2,676,000</td>
<td>1,028,461</td>
<td>2,325,047</td>
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<td>AUSTRIA</td>
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<td>PORTUGAL</td>
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<td>2,176,362</td>
<td>55.25%</td>
<td>1,232,128</td>
</tr>
</tbody>
</table>

**Note:** The table represents data for various Member States in Europeana, listing the number of objects, indicative targets, and the percentage achieved as of October 2011 and May 2014.
5. DIGITAL PRESERVATION

Member States report a wide variety of long-term preservation strategies or schemes, from the (exceptional) creation of a dedicated body (e.g. DE, SE) to the simple preservation schemes or plans limited to a specific sector or institution. Exchange of information often takes place within the framework of dedicated EU-funded projects or platforms such as the PrestoCentre (https://www.prestocentre.org/)\textsuperscript{33}, which also acts as European competence centre for audiovisual material, and the Digital Cultural Heritage Roadmap for Preservation (http://www.dch-rp.eu/). Two competence centres launched during in 2011, PrestoCentre for audiovisual material and Impact (http://www.digitisation.eu/about/) for text material, provide new cross-border platforms for sharing expert knowledge and state-of-the-art experience in this area. Few report explicit provisions to allow format-shifting and migration of cultural material for preservation purposes or specific arrangements for long-term preservation of digital-born material. Delivery of works without technical protection measures for legal deposit libraries is not always ensured, or only for some types of materials (e.g. films). Much remains to be done in the area of web-content preservation (e.g. provision for multiple copying, format migration or web-harvesting) or to prevent wide variations of Member States’ legal deposit arrangements.

The Recommendation invites Member States to strengthen long-term preservation strategies and implementation plans, exchange with each other on both, provide in their legislation for multiple copying and migration of digital cultural material by public institutions for preservation purposes, make arrangements for the deposit of digital-born material to guarantee long-term preservation and ensure their efficiency by (1) requiring deposit of protection-free material to enable acts required for preservation purposes, (2) making legal provision to allow exchanges between legal deposit library, and (3) allowing preservation of web-content by mandated institutions through appropriate collecting techniques such as web-harvesting. When establishing or updating policies and procedures for the deposit of digital-born material, Member states are also invited to take into account developments in other Member states, in order to prevent a wide variation of deposit arrangements.

5.1 Long-term preservation strategies and action plans

Seventeen Member States (AT, BE, CZ, DE, DK, ES, FR, FI, HU, IT, LT, LU, NL, PL, SE, SI and SK) have reported to have long-term preservation strategies under way or being designed at national, sector or institution's level, several of them already running operational plans to implement those strategies. Exchange of information often takes place within the framework of dedicated EU-funded projects or platforms such as the PrestoCentre (https://www.prestocentre.org/)\textsuperscript{34}, which also acts as European competence centre for audiovisual material, and the Digital Cultural Heritage Roadmap for Preservation (http://www.dch-rp.eu/). Two competence centres launched during in 2011, PrestoCentre for audiovisual material and Impact (http://www.digitisation.eu/about/) for text material, provide new cross-border platforms for sharing expert knowledge and state-of-the-

\textsuperscript{33} Funded by the EU’s Seventh Framework Programme for Research, governed by the PrestoCentre Foundation and managed by Presto4U (https://www.prestocentre.org/4u) for the period 2013-2014.

\textsuperscript{34} Funded by the EU’s Seventh Framework Programme for Research, governed by the PrestoCentre Foundation and managed by Presto4U (https://www.prestocentre.org/4u) for the period 2013-2014.
art experience in this area. Some exchanges also take place within regional groups of countries cooperation fora, such as the Visegrád Four Group, which includes the Czech Republic, Hungary, Poland and Slovakia.

One country (FR) considers that defining a long term preservation strategy is a national priority which is being examined by a dedicated working group and reports various initiatives to sustain long-term access to digital cultural material by libraries and archives, including audio-visual ones, involving of public and private partners, the development of dedicated tools and software and possibly public loan financing under the ‘Investissement d’Avenir’ programme. Another country (UK) reported considerable efforts to address the sustainability of digital cultural content on a distributed basis, including preservation standards and methods, business cases, development of shared infrastructure, though not following an overarching strategy. Two countries (CY, FR) report measures individually taken by competent bodies to achieve long-term preservation, like backup procedures, promotion of collections, constant updates and metadata quality. Lastly, one country (LV) reports plans for the development of guidelines on the long-term preservation of digital material and gathering of the corresponding know-how in neighbouring countries as well as internationally.

Q. 8 Strategy for long-term preservation of digital material, implementation plans, exchange of information?

Sweden: Long-term preservation is part of the 2012-2015 national strategy for digitisation, digital access and digital preservation established by the Swedish Government in December 2011, which Riksarkivet (the National Archives) are tasked to implement thorough a secretariat Digisam (http://www.digisam.se/) set up to coordinate efforts to that effect by all State cultural heritage institutions. Digisam is also tasked to follow up and evaluate the strategy and to develop proposals for national guidance on coordinated digital information management and a coordinated and cost-effective long-term digital preservation of collections and archives, including audio-visual archives. In 2013, Digisam has initiated a pilot study on digital preservation. The Head of Digisam is also a member of the Member States Expert Group on Digitisation and Digital Preservation set up by the European Commission. Digisam is also participating in DCH-RP, Digital Cultural Heritage Roadmap for preservation (http://www.dch-rp.eu/), a coordination action supported by the European Commission under the e-Infrastructure Capacities Programme. The main outcome will be a Roadmap for the implementation of a preservation federated e-infrastructure, supplemented by practical tools for decision-makers. It will be validated through a range of proof concepts, where cultural organisations and e-infrastructure providers will work together on concrete experiments.

Finland: According to the national plan for long-term preservation of digital cultural heritage, the digital preservation (DP) system will be implemented in two distinct phases: preparation of the DP system (Phase I) and implementation of the DP system (Phase II). The
DP system preparation phase will ensure that the original digital data (bit stream) of the information remains unchanged and can be preserved on up-to-date storage media. Launching of the bit stream preservation system in December 2013 will ensure that the digital information in the partner organisations’ possession can be reliably preserved until the DP system as a whole becomes available. Phase II of the implementation of the DP system will ensure that the digital information remains intelligible and that the actual information can also be accessed by future generations. In this phase, the necessary hardware, services, and processes will be built for the shared use of the partner organisations. The long term lends a special feature to the design of the system, as the data must be managed over a time span extending to centuries. This also directs the design towards an approach that should enable interorganisational cooperation, system interoperability and compatibility of digital information, as well as consideration of a steady stream of changes in technical systems and components from the start.

**Italy:** Magazzini Digitali (Digital stacks), a project funded by MiBACT, presently operative with a core of selected partners (the National Libraries of Florence and Rome and the Venice Marciana Library) aims at building a backbone that serves the long-term preservation of the digital resources of Italian cultural institutions. The prototype version of the service is evolving to an operative platform. A comparative study among the preservation strategies of different European countries was carried out in 2011 with the DC-Net EU project (http://www.dc-net.org/getFile.php?id=467). The results of DC-Net were taken up in DCH-RP, the ongoing initiative coordinated by the ICCU that involves cultural institutions and e-infrastructure providers in the definition of a roadmap for preservation.

**Belgium:** Long-term preservation is one of the main goals of the Flemish Institute of Audiovisual Archiving (VIAA). The “technical and organisational standards and guidelines for cultural digitisation initiatives funded by the French speaking Community” support the adoption of OAIS as a reference model for long-term preservation. One of the three pillars of Phase 2 of the Digitisation Plan of the Federal Institutions will be the establishment of a common platform for long-term preservation.

**Czech Republic:** Government Resolution No. 70 of 30 January 2013 approved a Cultural Content Digitisation Strategy for 2013-2020. The Ministry of Culture, in cooperation with other central agencies, is responsible for implementing this strategy. The purpose is to ensure equal access to cultural content in digital form for both the professional and lay public, digitise the cultural content, gather digital documents as part of cultural heritage, safely keep digital documents, create organisational and technical conditions for their permanent preservation and accessibility, provide for inter-sectoral cooperation, and secure funding. Quantitative and qualitative targets for long-term preservation of digital material will be defined on the basis of the results of the stocktaking of the state of digitisation and after defining the standards and methods. For libraries, Government Resolution No. 28 of 11 January 2012 defines objectives for the digitisation of cultural content materials and for creating repositories for long-term preservation of digital documents and addresses necessary legislative amendments to enact mandatory storage of electronic documents (both digital-born and digitised ones). A research and development project preparing a proposal for draft legislation to address the issues of preserving electronic publications is currently under way. Museum-related issues are partially addressed by the ISO Programme – Integrated System of Protection of Movable Cultural Heritage, providing a basis for creating digital databases. At the international level, experience and information is being

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exchanged mainly among the member countries of the Visegrád Four Group (V4).

**Germany:** Initiated and supported by Nestor, the German competence network for digital preservation ([http://www.langzeitarchivierung.de](http://www.langzeitarchivierung.de)), many initiatives regarding the establishment of a national strategy for long-term preservation have been undertaken. In 2012, the German Research Foundation issued a call for proposals to combine all these initiatives into one comprehensive approach aiming for a national infrastructure for digital preservation. However, none of the submitted proposals was regarded as adequate and the German Research Foundation has reissued the call in 2013. Nestor is willing to take over extended responsibility. As part of the ongoing development of the Deutsche Bibliothek there are plans to establish a hosting infrastructure (storing data for immediate and preformat access) as part of the DDB services.

**France:** Defining a strategy for the long-term preservation of digitised documents is a priority of the Ministry of Culture and Communication. A working group set up in 2014 will address this national endeavour. BnF, the French National Library, has implemented a system to ensure sustainability of its digital resources called SPAR (‘Système de Préservation et d’Archivage Réparti’), developed under a contract with the ATOS company and compliant with the ISO-14721:2003 standard, the benchmark for an open information archiving system enabling storage and safeguard of digital objects and continuous access in case of format obsolescence. In 2012 the data storage volume was 2 354 To out of a total storage capacity of 3 855 To. The audiovisual collections of the BnF and INA (‘Institut National de l’Audiovisuel’) are stored in wide capacity magnetic bands (LTO) managed by robots and duplicated for separate location storage (2 000 To for the BnF and 5 115 To for INA’s radio and TV broadcasts end 2012). In 2012 a common digital archiving system software called VITAM was developed by the national Archives, the archives Directorate of the Ministry of Foreign Affairs and the Memory, Patrimony and Archives Directorate of the Ministry of Defense, supported by the Inter-ministerial Service of the ‘Archives de France’, which might be proposed for funding under the ‘Investissement d’Avenir’ public loans programme.

**Slovenia:** The most important strategic documents in this field are: Protection of Documents and Archives and Archival Institutions Act and the Development Strategy of the Slovenian public e-archives and Action Plan. Moreover, the Ministry of Culture is preparing Guidelines for Gathering, Long-term Preservation and Access to eCultural Content as a result of a comprehensive public debate on the Digital Agenda in the field of culture carried out in partnership with the European Commission in 2013. The document is designed as a check-list for practitioners and policy-makers consisting of analysis, typology of cultural heritage, implementation of ISO 14721 (OAIS) standard (already registered as national standard) as well as an overview of relevant legal framework and necessary improvements.

**Lithuania:** The problems of long-term preservation of digitised content will be incorporated in the new planning document for the Lithuanian Cultural Heritage Digitisation Policy.

**Luxembourg:** The National Library and the national Archives have defined requirements for a national digital preservation solution for their common needs and are currently working on the approval and resourcing of the first implementation phase of the project. Consultation and reference visits have taken place in Belgium, the Netherlands, Switzerland and France.

**The Netherlands:** The major players in the public domain work together in the Dutch Coalition for Digital Preservation to develop a strategy. For publications, audio-visual media and archaeological resources, national e-deposits are currently in use and/or under
development. The National Archive is in collaboration with Regional Historic Centres and some of the municipal archives (Amsterdam, Rotterdam, Utrecht) preparing an e-deposit for archival materials. For other digital heritage (museum collections, monuments, etc.), no national solution is currently in hand. PrestoCentre is an international collaboration between several renowned institutions in Europe and beyond. The centre works with academia, industry, government and the wider community to explore the potential of new technologies for digital preservation. The Netherlands Institute for Sound and Vision hosts the centre.

**Denmark:** The National Archives, the Royal Library and the State and University Library have developed a model for the provision of a national repository for digital preservation with the involvement of international expertise.

**United Kingdom:** While there is no strategy for the long-term preservation of digital material, efforts are being made to address the sustainability of digital cultural content on a distributed basis, addressing preservation standards and methods, business cases for preservation and the development of shared preservation infrastructure. Notable efforts are being made in collaboration with the Higher and Further Education communities.

**Hungary:** The strategy was the creation of MaNDA in the period 2011-2013, but its implementation and construction has not yet been achieved. One of the most important tasks regarding long-term preservation of digital material is creating a new decree on legal deposit. This legislation will allow extending long-term preservation to digital content.

**Cyprus:** Cyprus competent bodies which can benefit from long-term preservation of digital material are implementing a series of measures to accomplish that, such as backup procedures, constant updates, promotion of collections and metadata quality.

**Latvia:** development of guidelines for the long-term preservation is planned in the State Culture Policy Guidelines 2014-2020. In the meantime, experts are developing know-how by participating in digitisation-related international conferences and learning from experiences in Estonia, Lithuania and Finland.

### 5.2 Multiple copying and migration

Fourteen countries (BE, DE, CZ, EE, FI, GR, IT, LT, LU, NL, PT, PL, SE, SI), have reported explicit provisions in their national copyright or archival law allowing multiple copying and/or migration of digital cultural material by public institutions for preservation purposes, though some are only applicable to some sectors, institutions or government layers, or lacking the necessary comprehensiveness for a fully-fledged migration or format-shifting of any cultural material wherever required for preservation purposes. One country (UK) reported that such a provision is being considered and anticipate a clear ruling on this in 2014/2015. Another country (LV) reports that though not specifically provided, the wording of the libraries exception in the Copyright Law is quite vague and does not explicitly rule out multiple copying and migration.
Sweden: there is a clear provision for archives and libraries in "Lag (1990:729) om upphovsrätt till litterärliga verk" to migrate for the preservation, complementary and scientific reasons, which is currently under revision.

Finland: In 2005, new provisions were inserted into the Copyright Act on reproduction and communication to the public of works within archives, libraries and museums. According to Section 16 (14.10.2005/821) of Rules on Reproduction in archives, libraries and museums, an archive, a library or a museum open to the public, to be determined in a Government Decree, may, unless the purpose is to produce direct or indirect financial gain, make copies of a work in its own collections for the purpose of preserving material and safeguarding its preservation, for technically restoring and repairing material, administering and organizing collections or other internal purposes required by the maintenance of the collection and supplementing a deficient item or completing a work published in several parts. There are no specific limitations to the number of copies an institution is allowed to make under this provision. It is therefore considered that a copy may be made in every such case when there's a need to migrate the work/collection to a new format. Section 16a includes provisions, in line with Article 5(3)(n) of Directive 2001/29/EC, which enable the communication to the public of works within the above-mentioned archives, libraries and museums.

Czech republic: the copyright legislation currently in force provides for such copying of digitised material as necessary for the given purpose and allows for copying in all formats needed to archive and preserve material, but does not explicitly provide for migration of digitised material. The ultimate purpose of the Government's efforts towards centralized long-term storage of digital documents is to build a National Digital Archive, but so far it only exists as a specific provision of the Archiving Act in force since 1st July 2012.

Germany: Certain rules do provide for this but they are not applicable to all public institutions but, first and foremost, to the German National Library. In recent years some of the federal states have introduced similar rules to provide for the preservation remit of their own libraries. However, laws that allow all public institutions multiple copying and migration still remain a desideratum.

Slovenia: provisions to that effect are set in the Protection of Documents and Archives and Archival Institutions Act and the Regulation on Documents and Archives protection.

Estonia: Estonian legislation permits multiple copying for the purpose of digitisation and digital preservation of cultural material.

The Netherlands: the Dutch law on copyright specifically provides exemption from copyright infringement in case of use of digital cultural material for the purpose of restoration, preservation or mitigation to current technology.
Denmark: Danish Act on Copyright, § 16, contains legal provisions for preservation purposes.

Lithuania: the Law on Copyright and related Rights stipulates that archives, libraries, educational establishments and museums may reproduce works from their stock for the purpose of preservation. This provision does not apply to works published on the Internet.

Poland: Article 9 of the Copyright Act stipulates that libraries, archives and schools shall be allowed to make or have made copies of disseminated works in order to supplement them, maintain or protect one’s own collections.

United Kingdom: Specific provision under law for the multiple copying and migration of digital cultural material for preservation purposes is under consideration and a clear ruling is expected in 2014/2015.

Latvia: At the moment there is no explicit provision of law to allow multiple copying and migration of digital cultural material by public institutions for preservation purposes. However, the wording of the libraries exception in the Copyright Law is quite vague and does not explicitly prohibit multiple copying and migration. A library, archive or museum shall be entitled to reproduce in a digital form works held in their permanent collection, without a direct or indirect commercial purpose, in order to preserve it. Works published in Latvia which are not commercially available can be reproduced in a digital format, unless an agreement with the author determines otherwise.

5.3 Digital legal deposit

Sixteen countries (AT, BE, CZ, DE, DK, EE, FI, GR, IT, LV, LU, NL, PL, SE, SI and UK) have reported measures for the deposit of digital-born cultural materials by digital legal deposit libraries, without technical protection measures or accompanied by the means to ensure they do not hinder the long-term preservation of said materials. In some cases (e.g. UK), this involves the obligation for the publisher to deliver a copy of any computer program or any information necessary to access the deposited work, such as manual or guides. In other cases (LTV), it involves efforts to negotiate and agree specific arrangements for the deposit of digitally-born material with each publisher separately, though not always successful in ensuring removal of technical protection measures.

One country (CY) reports that no arrangements had to be made, since there was no conflict between the technical protection measures and the acts that libraries have to undertake to guarantee long-term preservation.

Q. 10.1  Arrangements made to ensure no technical protection measures hinder long-term preservation of digital-born material?

Austria: current legal deposit determines that material has to be submitted without technical protection measures.
**Sweden:** Since 1st July 2012, the National Library of Sweden has a legal deposit act regulating deliveries of electronic material. Copies of single files of text, sound or (moving) pictures produced and made accessible by professional producers, actors, state and municipal authorities shall be delivered to the National Library. Certain information about the files must be attached in order to preserve and make them available for the future, such as (1) where and when was the file first published (URL), (2) on which format (jpeg, pdf, html, etc.), (3) code to “open up” the file, if password protected and (4) relation between the different files of e.g. an article or a printed book and web-based manifestations. In the metadata specifications, there is more information to be filed in, not imposed by law but partly by the technical standard.

**Italy:** Magazzini Digitali, a project funded by MiBACT, presently operative with a core of selected partners (the National Libraries of Florence and Rome and the Venice Marciana Library) aims at building a backbone that serves the long-term preservation of the digital resources of Italian cultural institutions. The prototype version of the service is evolving to an operative platform.

**Finland:** the National Library takes care of the legal deposit of digital materials by automated searches and by cooperating with publishers of such materials based on the Act No. 28.12.2007/1433 on Deposit and Preservation of Cultural Material. The Library has issued guidelines to publishers on how to deposit materials and normally no technological protection measures are used in the deposited files and, even if there were, the National Library would have the right to circumvent them in order to deposit a copy in its collections. The National Library is involved in the development of the METS and ALTO formats.

**Estonia:** the National Library has reached agreements with larger publishers of newspapers, journals and e-books for voluntary digital legal deposit of print files of their publications. These agreements contain recommendations on non-encryption of deposited files which, in most cases, are followed and if not, the files are returned by the Library and new files requested for deposit without encryption. The current Legal Deposit Act reserves to libraries the right to process deposited files. A proposed amendment to the Legal Deposit Act, mandating digital legal deposit and including regulations for deposit of decrypted files, is currently pending adoption.

**Luxembourg:** the legal framework for legal deposit is in place since 2004 and has been clarified in respect of specific requirements of digital content in 2009 (Règlement Grand-ducal relative au dépôt legal de 2009). The legal requirement to deposit is only fulfilled if the National Library or the National Audiovisual Centre are able to make high quality copies of the digital content and all relevant metadata. If no such copies can be made, the depositor is obliged to provide, on demand, any information or tool required to make such a copy.

**Slovenia:** the legal deposit provisions ensure that digital-born publications are deposited without any kind of protection for long-term preservation purposes.

**Germany:** the 2006 law regarding the German National Library explicitly states that preservation copies for the library must be free of technical protection measures. Similar laws have been passed in several federal states with respect to copies deposited in their respective libraries. The practical implementation of these laws remains problematic though, since some see a conflict between them and the copyright law.

**Belgium:** the Royal Library has set up an e-depot repository where electronic documents
can be deposited on a voluntary basis. In the French Community, each producer who receives a film aid must sign a contract with the CCA (Centre du Cinéma et de l'Audiovisual) which requires the deposit of a digital, non-encrypted copy (2K DCP).

**Czech Republic:** Section 43(4) of Copyright Act No. 121/2000 provides that an author who used technical protection measures to protect his/her work must make the work accessible to authorized users to the extent necessary to meet the purpose of the stated use of the work.

**Poland:** in order to ensure safe archiving of the digital-born documents sent to the legal deposit libraries (National library and Jagiellonian Library) to comply with legal deposit requirements, the Electronic Document Repository of the National Library was established in 2009. Publishers who provide books and electronic journals to the Electronic Document Repository are invited to upload files in formats allowing their perpetual archiving i.e. without software or hardware security measures. The National Library has developed a list of technical conditions to be met by files sent as mandatory copies. Most electronic books and journals are passed under PDF/A format, although more and more publications are recently recorded in formats intended for mobile devices (mobi and epub or mp3 for music).

**The Netherlands:** the deposit function is defined by archives legislation (Archiefwet 1995), which does not differentiate between digital-born and digitised material. Archival regulation (Archives Regulation 2010) sets requirements on metadata, conversion, migration and emulation, and formats (open formats are mandatory, if applicable). The Netherlands has no legal deposit legislation for libraries, but publications get in the KB collection on the basis of voluntary agreements with publishers. The Institute for Sound and Vision has taken the responsibility for audiovisual material. Scientific data will be preserved by DANS (Digital Archiving and Networked Services). Some smaller institutions take care of art-objects.

**United Kingdom:** Guidance provided on the Legal Deposit Libraries (Non-Print Works) Regulation 2013 state that the publisher must deliver, in relation to off-line work and online work with an agreed method of delivery: a copy of any computer program and any information necessary to access the work (including any information necessary to allow the reader to read the work), and a copy of any manual or other material that accompanies the work and is made available to the public. This is intended to cover any additional material, such as computer programs or manual/guides, which are published to accompany off line formats such as CD ROMs, but also any technical protection measures that apply to off line works and any programs or information which is necessary to access online works delivered in a manner agreed between the publisher and the deposit libraries.

**Latvia:** Publishers in Latvia have a legal obligation to send copies of each of their publications (including electronic publications) to the National Library according to the Legal Deposit Law and the National Library is entitled to harvest the works published online. The National Library works to negotiate and agree on necessary specific arrangements for the deposit of material created in digital form with each publisher separately, however it is not always successful in ensuring that technical protection measures are removed.

5.4 Provision for transfer of digital legal deposit (LD) works between LD libraries

Two years after the recommendation, only six countries (AT, DK, FI, NL, PL and UK) reported provisions in their copyright, archives or media legislation allowing the transfer of digital legal
deposit works among legal deposit libraries. Some of these provisions only apply to a specific sector (e.g. archives or libraries) and in other cases, legislation to allow this is envisaged, being prepared or pending adoption. Countries not having digital legal deposit legislation have obviously been counted as not providing for the transfer possibility of digital legal deposit files among (non-existing) digital legal deposit libraries.

Q. 10.2 Provision to allow transfer of digital legal (DL) deposit works among DL libraries?

![Chart]

**Denmark:** legal deposit libraries in Denmark give joint access to legal deposit works.

**United Kingdom:** yes, delivered material is made available to all deposit libraries.

**Poland:** Article 27(5)(4) of the Libraries Act related to the national library network stipulates that public libraries included in the network are obliged to cooperate in the exchange and transfer of library materials and information, including electronic documents. In accordance with the applicable Regulation on the list of libraries entitled to receive mandatory copies and the rules and procedures for the transfer of mandatory copies of publications on an electronic medium, the mandatory copies shall be transferred to the National Library and the Jagiellonian Library, which are the only ones entitled to receive mandatory copies of electronic publications.

**Finland:** The Finnish Copyright Act allows for the access to digital legal deposit collections of the national Library in the premises of other legal deposit libraries in the country via a device designated for that purpose. The other legal deposit libraries in Finland are the Library of the university of Eastern Finland, the Library of University of Jyväskylä, the Library of University of Oulu, the Library of University of Turku and the Library of Åbo Akademi. The collections are also accessible in the premises of the National Audiovisual Archive.

**The Netherlands:** these provisions apply to public archives only. There is no Dutch legal deposit legislation for the national Library.

**Austria:** the transfer of digital legal deposit works is regulated in the media law.

**Sweden:** the legal deposit act of electronic material only deals with 'collecting' the material. The National Library discusses the possibility of transferring the information in the files to other deposit libraries and tries to follow the legislation in other countries, but there is no legal guidance or information so far.

**Estonia:** transfer is not available at the moment, because the national Library is the only library that has made arrangements for collecting digital print files. A proposed amendment to the Legal Deposit Act will regulate, once adopted, the dissemination of digital legal deposit copies between the National Library (primary recipient of the digital deposit copy) and Tartu University Library (secondary storage site for digital legal deposit copies).
Germany: this issue needs to be addressed in future negotiations regarding copyright laws. In the direct negotiations between the German libraries and the German Publishers’ and Booksellers’ Association, the latter suggested a licence for such provisions to be paid to the collecting society VG Wort, which was refused by the libraries.

Hungary: There is a principle according to Act No. LXXVI of 1999 on Copyright, Article 38(5): in the absence of a contractual provision to the contrary, works forming part of the collection of publicly accessible libraries, educational establishments, museums and audiovisual and sound archives qualified as public collection may be, for the purpose of research and private study, freely displayed to individual members of the public on the screens of dedicated terminals in the premises of such establishments and, in the interest of this, they may be communicated, including their making available, to such members of the public, provided this is not for direct or indirect earning or increase income. However, in practice there are barriers.

5.5 Web harvesting
Fourteen countries (AT, CZ, DE, DK, EE, FR, FI, LT, LV, NL, PT, SE, SI and UK) reported measures to allow preservation of web content using techniques for collecting cultural material from the web such as web harvesting. Normally these provisions target works published in websites with the relevant country’s domain name or otherwise connected with the country doing the harvesting. One country (FR) reported that document processing of its legal deposit is shared with the archives’ one.

Q. 10.3 Measures to allow web content preservation using techniques to collect content from the web such as web-harvesting?

Denmark: web harvesting of Danish content is provided for by the Danish legal deposit act. Web harvesting is the responsibility of the State and University Library, but publishers of web content are obliged under the law to provide access codes, etc. upon request.

Portugal: web content is harvested and preserved by the Fundação para a Computação Científica Nacional (FCCN), which acts as the Portuguese web archive: http://sobre.arquivo.pt/portuguese-web-archive-2?set_language=en.

The Netherlands: the National Library is preserving cultural Dutch websites, 3,000 in 2009 growing to 10,000 in 2013. However, there is no legal deposit legislation for this activity. The library notifies the website owner of its plan to harvest his website and gives him the possibility to object to this. Smaller institutions take care of the preservation of websites on a thematic field (e.g. political parties or local websites). There is no legislation on web harvesting for long term preservation and access (also regarding privacy aspects).
**Austria:** the new Austrian Media Law was approved by the national Assembly in January 2009 and became operative in March 2009. This amendment to the law is the legal basis for web archiving and governs the collection of online publications of the Austrian National Library. In principle the webpages with the domain ".at" and pages that are geographically situated in Austria, as well as pages that have a specific connection with Austria, are collected. Currently, the Austrian National Library hosts more than 1 billion web pages. The complete audio and video source material of all web-exhibitions and source editions is digitally long-term archived (broadcastwav, ffv1) in the Austria Mediathek. Preservation of web-content or web-harvesting in the field of audio and video sources is not only a question of rights but also a question of technical infrastructure: file format and player, both will constantly change over time.

**Finland:** the Finnish Copyright Act was amended in 2006 and the National Library of Finland was given mandate to make copies of works that have been made available to the public in data networks. Preservation of web content was made a duty of the national Library by the Act on Depositing and preservation of Cultural materials (Act No. 28.12.2007/1433). The purpose of the Act is to preserve for future generations, and make available to scholars and others who need them, the materials of national culture made available to the general public in Finland. According to the Act, the National Library shall, employing software, collect web contents available to the general public. In this collection, the Library shall include contents from different points in time, in a representative and multifaceted manner. The Act applies to web contents located on servers in Finland or whose primary audience is the general public in Finland. The National Library of Finland is thus the only organization mandated for web preservation. The Library uses two methods of collecting web contents: web harvesting and legal deposit.

**Sweden:** Deliveries and preservation of single files produced and made available by Swedish professional producers, publishing houses, daily newspapers, governmental and municipal authorities etc. are regulated in the act on legal deposit of electronic material: Lag (2012:492) om pliktexemplarb av elektroniskt material. Web-harvesting of the "Swedish Internet" in connection with personal data is regulated in a decree from 2002 (Förordning (2002:287) om behandling av personuppgifter i Kungl. Bibliotekets digitala kulturarvsprojekt).

**United Kingdom:** within the Legal deposit (Non-Print Works) regulations provision is made for the deposit libraries to harvest the web. The scope of this harvest is limited to work published in the United Kingdom. The guidelines define this scope as covering content which (1) is made available to the public from a website with a domain name which relates to the United Kingdom (or a place within the United Kingdom), or (2) is made available to the public by a person and any of that person’s activities in relation to the creation or publication of the work takes place within the United Kingdom.

**France:** the legal deposit is operated by the National Library (BnF) for all web publications (representing 370 To or 18.8 billion URLs end 2012). The digital shift has strongly influenced the legal deposit activities: web harvested by robots since 2004, but also legal deposit by extranet (37% in 2012). INA, the National audiovisual archive, ensures the management of the web’s legal deposit for audiovisual content (web TV, web radios, radio/TV programmes dedicated sites) through its ‘Inathèque’ service, which from early 2009 to September 2013 had collected over 11,000 sites and 200 To of data. The legal deposit document processing work is shared with the archives’ one and the storage of digital files is ensured by INA, (93 TV channels and 22 radios in 2012, up from 7 channels and 5 radios in 1995).
Latvia: According to the legal deposit Law, freely accessible online publications shall be harvested and archived automatically by the national library. Publishers of online publications of restricted access shall ensure access to an online publication, in order for the National Library to obtain a copy thereof. Currently, the National Library harvest 3,000 web pages in the Latvian domain name once a year and is working to expand the scope of harvesting activities, focusing on acquisition of separate works (mainly digital text based works) published online.

Hungary: The elaboration of the legal conditions for regular and long-term web archiving is still in progress.

5.6 Co-ordinated approaches on legal deposit arrangements

Seventeen Member States (AT, CZ, DE, DK, EE, ES, FI, GR, HU, LV, LU, MT, NL, PL, SE, SI and UK) reported taking into account other countries experiences, or assisting them in the development of existing schemes, when establishing or updating their policies/practices regarding legal deposit of digital-born material.

Most often this takes the form of collaboration in cross-border projects, working groups or platforms - such as the joint committee of representatives from the Conference of European National Libraries (CENL) and the Federation of European Publishers - as well as exchanges with partner institutions abroad regarding technical or legislative initiatives in this field. Several EU-funded projects for digital preservation have been quoted in this connection, such as Planets, Scape or Aparsen.

Q. 11 Taking into account developments in other Member States to prevent wide variation in deposit arrangements?

Austria: the Austrian national Library has been and is a partner in several EU-funded projects related to digital preservation e.g. Planets, Scape, Aparsen and is in contact with other national libraries on a bi-lateral basis or via several working groups.

Finland: the National Library has a pilot project on the digital deposit of newspapers. It has benchmarked other national libraries e.g. in Norway and Estonia in creating its own system. The National Library follows closely international developments in digital legal deposit. It is, for example, an active member of the International Internet Preservation Consortium. There has been discussion on common metadata guidelines within the museum sector in Nordic countries. The National Audiovisual Archive is collaborating with the Association of

36 http://www.planets-project.eu/about/.
37 http://www.scape-project.eu/.
38 http://www.alliancepermanentaccess.org/.
European Film Archives and the International Federation of Film Archives to define best practices.

**Denmark:** preservation institutions conduct dialogue with similar institutions in other Member States as a natural part of their activities.

**The Netherlands:** the KB is chairing the CENL/FEP Working Group on Digital Publications. The group issued on 30 May 2012 a Statement on the Implementation of Deposit Schemes for Non-Print Publications.

**Slovenia:** NUK cooperates and exchanges its experience and practices with other European national libraries and takes part in the adoption of recent standards. NUK is a member of the IIPC in the area of internet archiving and attends many international conferences in the area of digital preservation (iPRES, TPDL, IWAW), in which the recent practice in the field is presented.

**Poland:** Poland benefits from the experience of other countries in the field of digitisation, including through the exchange of best practices or active international collaboration with peer institutions - e.g. cooperation in the field of audiovisual resources maintained by the National Audiovisual Institute - and EU gatherings such as the Member States Expert Group on Digitisation and Digital Preservation.

**United Kingdom:** the British Library played a key role in developing the updated Statement on the Implementation of (Statutory and Voluntary) Deposit Schemes for Non-Print Publications, as part of a joint committee of representatives from the Conference of European national Libraries (CENL) and the federation of European publishers. The purpose of the updated Statement is simply to summarise the key features of existing schemes and best practice developments, with the intention of informing national libraries and publishers in Member States which may not yet have, or only partially, implemented any scheme, and assisting in the further development and improvement of existing schemes by highlighting important issues for consideration.

**Hungary:** The preparation of a new decree on legal deposit was preceded by an overview of the international legislation and the IFLA recommendation was taken into consideration.

**Cyprus:** Even though a great variety of deposit arrangements are being applied among Member States, Cyprus strongly supports the establishment of a common policy which aims at joining efforts and achieving uniformity, to the benefit of all Member States and memory institutions in particular.
CONCLUSIONS

During the first two years of implementation of Recommendation 711/2011/EU on digitisation and online accessibility of cultural material and digital preservation, progress has been made on areas such as digitisation planning, innovative funding schemes, orphan and out-of-commerce works or web content preservation. However, there is still room for improvement, as such progress does not cover all points in the Recommendation, nor is it evenly spread across sectors and borders.

Monitoring and reporting procedures need to be improved particularly at national level, as do digital cultural indicators, to enable more comparable figures and accurate/comprehensive overviews of the pan-European picture in this area. In spite of progress, the overall picture of cultural heritage digitisation remains fragmented and patchy, widely dependent on CI’s initiative or funding, with a limited overview of digitisation activities across sectors and borders. Use of public-private partnerships and structural funds is still scarce and unevenly spread, with some countries reporting none of these tools recommended by the Recommendation to co-fund digitisation.

Barriers still subsist in bringing public domain material online. Intrusive watermarking, low metadata quality or resolution or cultural institutions policy and contractual or statutory constraints (e.g. cultural heritage protection laws) still sometimes stand in the way of wider use and reuse of these materials, encouraged by the Recommendation. Implementation of the orphan works Directive or legal backing of licensing schemes for wide-scale digitisation and cross-border accessibility of out-of-commerce works is still pending adoption or consideration in all but a few countries, as is the implementation of rights information databases connected at European level.

In-copyright and audiovisual material has increased but still remains under-represented in digital cultural platforms like Europeana, as do public domain masterpieces from mainstream museums. Updated digitisation action plans and implementing strategies, as well as exchange of information on these, remains a challenge in many cases, as do the provisions for multiple copy/format migration and other arrangements for long term preservation of cultural material, particularly digital-born ones. Wide variations persist among the national legal deposit arrangements (some mandatory others voluntary, with different scope and reach), technical protection measures barring preservation acts by digital deposit libraries have not been completely set aside, and provision for inter-library transfers of digital legal deposit works or web-content preservation remains exceptional.