KEA EUROPEAN AFFAIRS

Feasibility study on data collection and analysis in the cultural and creative sectors in the EU

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ABSTRACT

EN – In the last twenty years, significant efforts have been made at the European level to improve statistics for the cultural and creative sectors (CCS). Yet, there remains no systematic means to fully comprehend the value of CCS and their contribution to the European creative economy and knowledge society. This study explores the data available from both Eurostat and 'alternative' sources including administrative registers, professional associations and rights management bodies, business registers, 'big data' from the Internet and Cultural Observatories. Whilst alternative data do not follow the same quality standards as official statistics, they may help obtain 'market intelligence' for a better understanding of the sector's performance, evolution and competitiveness. Three scenarios are proposed to make the most of existing data: Scenario 1 proposes continuing the work that Eurostat is currently carrying out on CCS to ensure that a minimum number of high quality statistics on these sectors are regularly produced and delivered; Scenario 2 suggests setting up a capacity building scheme to collect more and better quality data from alternative data providers on the basis of identified policy priorities (e.g. promotion of cultural diversity). This scenario foresees also the creation of a Creative Leadership Board acting as an incentive for industry representatives to engage in data collection and a CCS Virtual Platform as a 'one-stop-shop' for CCS data; Scenario 3 – the most ambitious one – recommends establishing a CCS Observatory with the mission of improving the collection and comparability of alternative data as well as developing new 'big data' methodologies to measure the creative economy.

FR – Au cours des vingt dernières années, des efforts substantiels ont été consentis à l'échelle européenne afin d'améliorer les statistiques sur les secteurs culturels et créatifs (SCC). Cependant, il n'existe à ce jour aucun moyen systématique d'appréhender pleinement la valeur des SCC et leur contribution à l'économie créative et à la société de la connaissance au niveau européen. Cette étude recense les données disponibles d'Eurostat ainsi que de sources « alternatives » incluant les registres administratifs, les associations professionnelles, les sociétés de gestion des droits, les registres d'entreprises, le « *big data* » et les Observatoires Culturels. Bien que les données alternatives ne suivent pas les mêmes standards de qualité que les statistiques officielles, elles peuvent toutefois permettre une meilleure connaissance et compréhension du marché ainsi que de la compétitivité, des performances et évolutions du secteur. Trois scénarios sont proposés afin de mieux exploiter les données existantes : le Scénario 1 propose de poursuivre le travail actuellement effectué par Eurostat dans les SCC afin de s'assurer qu'une somme minimum de statistiques de haute qualité sur ces secteurs est régulièrement produite. Le Scénario 2 suggère la mise en place d'initiatives de renforcement des capacités des fournisseurs de données alternatives afin de collecter plus de données sur les SCC et de meilleure qualité, sur la base de politiques identifiées comme prioritaires (i.e. la promotion de la diversité culturelle). Ce scénario prévoit également la création d'un Conseil de Direction Créatif qui inciterait les représentants de l'industrie à prendre part à la collecte de données, et une plate-forme virtuelle en guise de guichet unique pour les données des SCC. Le Scénario 3 – le plus ambitieux – recommande la création d'un Observatoire des SCC ayant pour missions d'améliorer la collecte et la comparabilité des données alternatives ainsi que de développer des nouvelles méthodologies relatives au « *big data* » pour mesurer l'économie créative.

EXECUTIVE SUMMARY

Context

In the last twenty years, efforts have been made to improve the volume, range and quality of statistics on the cultural and creative sectors (CCS) at European level. In 1995, the first resolution on the promotion of statistics concerning culture and economic growth was adopted (Council of the EU, 1995). Since then, various technical groups have taken the lead to review methodologies and definitions.

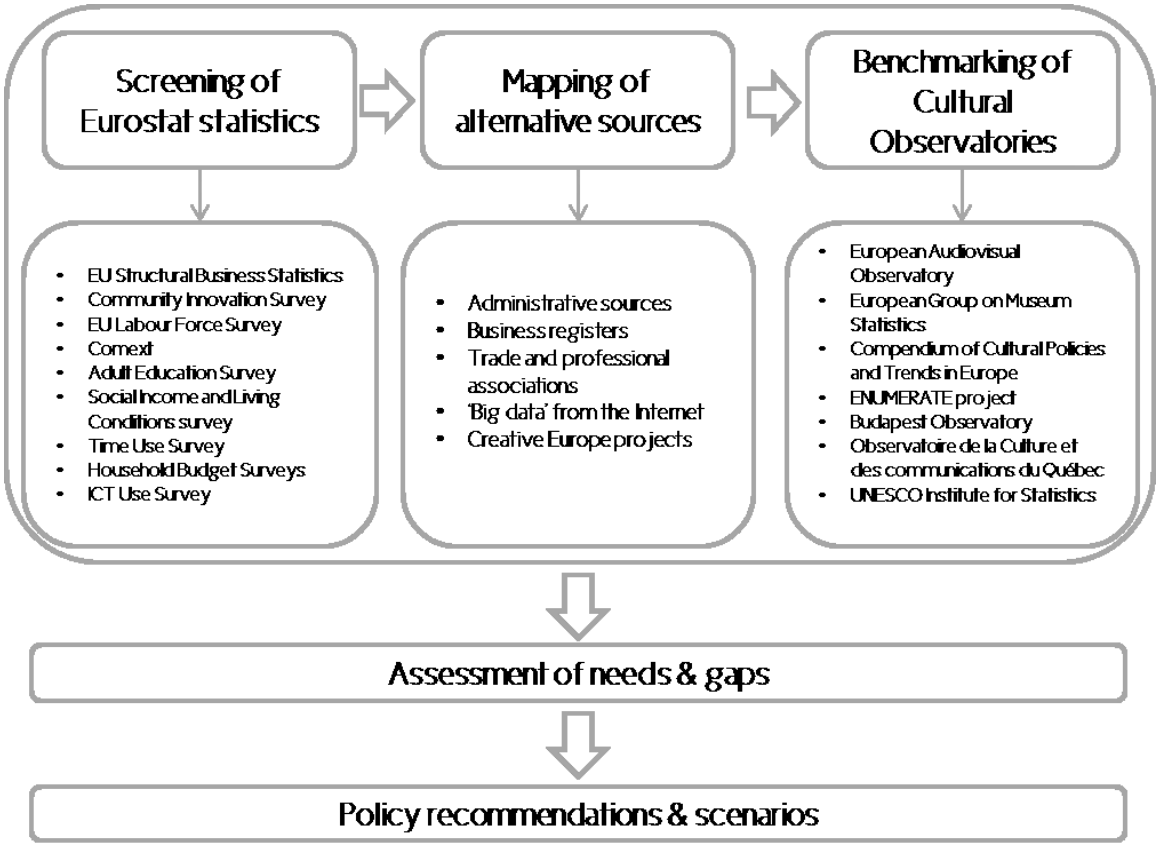
Despite these efforts, the economic and social value of the CCS remains largely underestimated due to the sectors' specificities: culture and creativity is often embedded in manufactured products (design in a garment or a car) or in popular new media services (digital delivery platforms making available creative 'content' such as music, games or films); creative enterprises or cultural entrepreneurs are not satisfactorily captured by statistical tools due to their size, the project-based nature of their activities or their social value (a major feature of cultural activities); furthermore, international classification codes developed since 1950s are often not adapted to capture the CCS and their contribution to innovation, social capital and the immaterial economy. Thus technological and societal evolution questions the validity of systems established to grasp the development of a knowledge society, led by creative talents, intangible values and non-technological innovation.

Methodology

To '*provide the European Institutions with the necessary information to build sustainable mechanisms for data collection, analysis and delivering with regard to the CCS other than the audio-visual sector in the EU*[1]' (from the Terms of References), the following main tasks were undertaken:

- Screening of official statistics from Eurostat and analysis of major needs and gaps;
- Mapping of alternative sources (other than Eurostat's) as a possible way to address data limitations in European official statistics;
- Benchmarking of Cultural Observatories including the analysis of data collected and their *modus operandi* as a source of inspiration for future data collection mechanisms;
- Preliminary assessment of needs and gaps as regards data from alternative sources, including Cultural Observatories;
- Development of policy recommendations and three possible scenarios of data collection mechanisms.

[1] The audio-visual sector is already extensively covered by the European Audiovisual Observatory (EAO): www.obs.coe.int



Main findings

The scrutiny of Eurostat sources shows that the European Union still has an incomplete and narrow picture of its creative capacity and the contribution of its cultural and creative sectors to its economic and social achievement. As a result, citizens and their political representatives often take the view that investment in culture is not a priority and have difficulties in linking culture and innovation.

The world envies European nations' abilities to nurture such a large amount of talents and creative businesses or cultural institutions in architecture, fashion, music, design, publishing, advertising, performing arts or animation. They embody Europe's quality of life, diverse cultures, values and aspirations. This richness drives exports of our intellectual property-based industries (luxury brands and copyright industries) or cultural tourism, for example contributing to Europe's attractiveness.

Whilst the world increasingly relies on the creative economy to drive sustainable growth, EU- wide statistics on CCS provide an incomplete picture. This makes it difficult to consider appropriate policies. Do the CCS contribute to value -creation and jobs? Is Europe competitive in the CCS and well positioned to develop a creative economy? Can we measure CCS' contribution to innovation? Does the EU do enough to stimulate culture-based creativity? Is the Digital Single Market supporting the development of CCS in Europe and what is its impact on the cultural offer and the diversity of this offer or cultural participation?

A reliable set of data is important to build policies, as this enables the EU to identify the competitive strengths of its CCS and develop a better understanding of market evolution. This is required if the EU is

willing to support the development of a creative economy and gain a better understanding of the next generation of industrial activities. It also serves, for instance, to conduct more meaningful trade negotiations or trade promotion activities in third countries.

The study shows that unless more resources are devoted to collect better CCS' data, at both European and national levels, it will be difficult to achieve a better understanding of CCS and their potential. Mobilisation of financial and human resources is rather challenging as CCS is generally not considered as a priority area of activities by statistical bodies.

In 2014, Eurostat started a four-year work plan (European Commission, 2014c) aimed at the development and regular dissemination of culture statistics taking into account, wherever possible, the recommendations proposed by ESSnet-Culture (2012)[2]. Under this work plan Eurostat will mainly:

- Open a dedicated section in the Eurostat website (already in operation[3]);
- Develop routines and estimation procedures for employment[4], international trade in cultural goods and business data;
- Produce and disseminate thematic tables with statistics on employment, international trade in cultural goods and business;
- Identify challenges and possible solutions for the production of continuative culture statistics on international trade in cultural services, cultural participation, private expenditure and public spending in culture;
- Release a new 'Culture statistics' Pocketbook (in December 2015).

It is important to provide Eurostat with adequate resources to enable the continuation of its work plan after the 2018 deadline. This work, however, is only a first step towards addressing the main European statistics challenges, namely:

- CCS' estimates are rarely comparable as EU Member States are still using different definitions of CCS or interpretations of statistical classifications (e.g. NACE classification for economic activities).
- Capturing the activities of a very large number of small and micro-companies is statistically problematic.
- It is notoriously difficult to measure the value of the output of non-industrial sectors such as museums, galleries and libraries but also performing arts.
- Copyright and neighboring rights royalty collection and intangible assets in general (including brand value) are not clearly identifiable from official statistics.
- Detailed data on new distribution and sales patterns or innovative forms of cultural engagement simply fall outside the scope of Eurostat's surveys;
- European official statistics do not provide a way to measure cultural diversity (whether in production, distribution or consumption).
- Statistical bodies have yet to make the most of exploiting 'big data' from Internet activities to map the sector better and fully comprehend the value of the creative economy.

[2] The European statistical system network on culture (ESSnet-Culture) was initiated in September 2009 for a two-year period. It was financed by the European Commission. ESSnet-Culture proposed for the first time a harmonised methodological framework to guide the production of cultural statistics (ESSnet-Culture, 2012).
[3] http://ec.europa.eu/eurostat/data/database: Database by themes --> Population and social conditions → Culture.
[4] Already developed and approved for employment by the Cultural Statistics Working Group on 28-29 April 2015.

The availability of alternative data sources suggests that there is scope to improve the understanding of the CCS:

Alternative sources explored		Examples of potentially retrievable data
Administrative sources		Admissions to cultural sites/museums/performing arts venues.
Business registers		Detailed financial data such as Gross Value Added (GVA) and % of intangible assets in companies.
Professional associations (including rights management bodies)		Sales of 'mainstream' and local contents, revenues from digital services (e-sales, downloads, streaming, etc.), copyright royalty collection and distribution.
'Big data' providers (Internet)		Data on digital 'practices' and 'transactions' (e.g. social media statistics, web search trends, etc.).
Cultural Observatories		Detailed data on specific sectors (e.g. audiovisual) or topics (e.g. cultural policies, digitisation of cultural heritage, museums' staff, admissions and financial structure, etc.).

Alternative data sources would not necessarily help address the 'structural gaps' identified in official statistics, but may help obtain 'market intelligence' on the sector, its evolution and performance. Alternative sources would help gather data on issues relevant to policy making. Data collection would be driven by policy objectives and priorities rather than by exhaustiveness and comparability objectives which are difficult to achieve. Such policy-led approach presents advantages for justifying the mobilisation of financial and human resources.

However, when implementing alternative data collection mechanisms several limitations have to be taken into account[5].

Firstly, geographical coverage will often be limited to some countries as data collection resources greatly vary from one EU Member State to another.

Secondly, as data are not necessarily produced for statistical purposes, internationally agreed definitions, standards and quality criteria (such as the Quality Assurance Framework of the European Statistical System) are often not applied by alternative data providers.

Thirdly, alternative data are often not comparable with official statistics, and not even between countries within the same dataset.

[5] *It is very important to collect reliable and comparable data from the perspective of complementing official statistics with alternative sources. In the context of this study, however, it was not possible to fully assess important aspects including accessibility, coverage, bias, confidentiality, etc. of alternative sources. Moreover, further research would be needed to verify the sustainability and continuity of data supply.*

Finally, accessibility is an issue for various kinds of data sources. Business registers, in particular, are only accessible against payment of a fee.

Recommendations

The report proposes measures to address and remedy the main shortcomings identified in the study with a view to providing European institutions with more and better data on CCS, on a regular basis. The objective is to build on the statistical work already achieved while taking into account budgetary constraints. They mainly aim at:

- Reconsidering CCS in international statistical classifications;
- Better measuring the sector and capturing its specificities;
- Collecting statistical data from alternative data sources, such as sectoral and trade associations, right management bodies, business registers and the Internet 'big data' to help gain a better understanding of the sector;
- Refining the quality and comparability of data from alternative sources;
- Providing EU institutions with new collection tools to complement Eurostat's activities and regularly provide policy-related statistical evidence (notably on cultural participation and diversity).

Considering EU's global competitive position in the CCS there is a strong case for improving statistical information at EU level.

Two categories of proposals are put forward:

- Measures to get more detailed statistical data and data relevant to market development;
- Measures to gather alternative data and develop indicators to serve the implementation of cultural policy priorities.

For the second set of measures, two policy priorities are used as a way of illustrating how policy objectives would help prioritise and limit data collection. The priorities would be, on the one hand, the increase in cultural participation and, on the other hand, the promotion of cultural diversity. The setting of priority policy objectives is a convenient way to limit and prioritise resources invested in data collection.

The proposed measures are summarised in the table below:

1. Improve overall statistical information on CCS	
1.1. Improve coverage of CCS in economic statistics	➢ Invite Eurostat in coordination with NSIs to propose amendments to existing international codes in relation to video games and music, when a revision of this classification will take place in the relevant international bodies (notably the UN Expert Group on international statistical classifications and United Nations Statistics Division (UNSD) for ISIC/NACE)[6]; ➢ Engage with national institutions, foundations and trade associations to work out more and better statistical definitions with a view to addressing statistical gaps (e.g. in the fashion and crafts industry, and the rapidly evolving sectors of music and video games); ➢ Encourage and support NSIs as well as Eurostat's efforts to enter into dialogue with the museums' and libraries' representatives (e.g. EGMUS and EBLIDA) to develop appropriate definitions and data collection capacities; ➢ Commission the development of relevant methodologies to gather key economic data from major art festivals in Europe (film, music, performing arts); ➢ Entrust a specialised research centre or *ad hoc* structure to be set up to develop 'big data approaches' to improve the mapping of the sector.
1.2. Improve data on cultural employment	➢ Invite Eurostat in coordination with NSIs to propose amendments to existing ISCO codes, for example in relation to art crafts, when a revision of this classification will take place in the relevant international bodies (notably the International Labor Organisation (ILO))[7]; ➢ Gather data on volunteers in museums with the help EGMUS, and build on EGMUS' initial cooperation with Eurostat to adopt appropriate methods to attach a monetary value to volunteers' time and better assess the GVA of the museum sector.
1.3. Improve coverage of sales and usage patterns linked to digital delivery methods	➢ Engage with European trade and professional associations, rights management bodies but also foundations and public institutions such as Cultural Observatories, to get economic data, especially on sectors which have been particularly affected by the digital shift (i.e. music, publishing and video games); ➢ Engage with large companies and private data providers such as Nielsen (which owns a rich database on music sales including online), or e-commerce and streaming platforms to obtain more in depth data on the sector's new sales patterns (e.g. downloads, streaming, etc.) and cross-border trade of cultural products and services.
2. Development of data sets to address policy priorities	
2.1. Data to measure cultural participation	➢ Regularly gather data on attendance at a sample of major European museums and heritage sites across the European Union, from NSIs or museums/heritage sites themselves; ➢ Engage with relevant organisations in Europe to measure cultural participation in the field of performing arts (e.g. European Festival Association (EFA), Culture Action Europe (CAE); International Network for Contemporary Performing Arts (IETM); Creative-Europe projects); ➢ Make use of social media and Internet data (e.g. search trends data on Google) to monitor new forms of engagement in cultural activities within the limits of confidentiality and data

[6] NACE classification is fully compatible with the UN ISIC (International Standard Industrial Classification, in custody of United Nations). A revision of NACE can be started only after revision of ISIC, managed by UN. For the moment there are no plans of revision for this classification. Such amendment processes would require several years before an agreement is reached.

[7] The custodian of ISCO is ILO and Eurostat has no power of decision on starting a revision of this classification. For the moment there are no plans of revision for this classification. Such amendment processes would require several years before an agreement is reached.

	protection rules; ➢ Build capacities amongst alternative data providers, including the beneficiaries of the Creative Europe programme, to collect more and better data on cultural participation with a view to fulfilling Creative Europe's indicators requirements.
2.2. Data to measure cultural diversity	➢ Agree on a common definition of diversity and list of key indicators through more research in the domain; ➢ Make use of Eurobarometer surveys to collect a minimum amount of regular data on diversity (e.g. European citizens watching films in original language); ➢ Collect potentially retrievable data on produced diversity, distributed diversity and consumed diversity from alternative data sources; ➢ Engage with private companies to obtain additional data on the topic (e.g. Nielsen, Spotify or iTunes and geographical distribution of music downloads/streaming); ➢ Ultimately mandate an *ad hoc* institution (e.g. a CCS Observatory) to regularly measure cultural diversity in Europe through the agreed indicators and existing data sources.

The study proposes three scenarios intended as a plan of action to improve collection, analysis and delivery of CCS data.

Each scenario addresses a number of gaps, adding each time a level of 'improvement':

- Scenario 1 addresses the sustainability of Eurostat's current work and proposes to continue such work beyond 2018 to ensure that a minimum amount of high quality statistics on the sector are regularly produced and delivered;
- Scenario 2 answers capacity building needs with a view to enable usage of alternative data sources. This scenario proposes the setting up of a CCS Virtual Platform as a 'one-stop-shop' gathering data on a voluntary basis, and the establishment of a Creative Leadership Board composed mainly of trade organisations to work with the European Commission on data collection related to identified policy themes;
- Scenario 3 proposes the setting up of a dedicated CCS Observatory to improve data collection and comparability from alternative data sources as well as make use of 'big data' for the development of new methodologies to improve the mapping of the creative economy and measure new forms of cultural participation (e.g. through social media).

The three scenarios are not exclusive but are considered as three-steps of a process to collect a more comprehensive set of data on CCS. They are inspired by existing and successful schemes managed at European level for some years.

RESUME

Contexte

Au cours des vingt dernières années, des efforts importants ont été consentis afin d'accroître le volume, la diversité et la qualité des statistiques sur les secteurs culturels et créatifs (SCC) à l'échelle européenne. En 1995, fut adoptée une première résolution portant sur la promotion des statistiques concernant la culture et la croissance économique (Conseil de l'UE, 1995). Depuis lors, de nombreux groupes de travail ont pris l'initiative de réviser les méthodologies et définitions applicables.

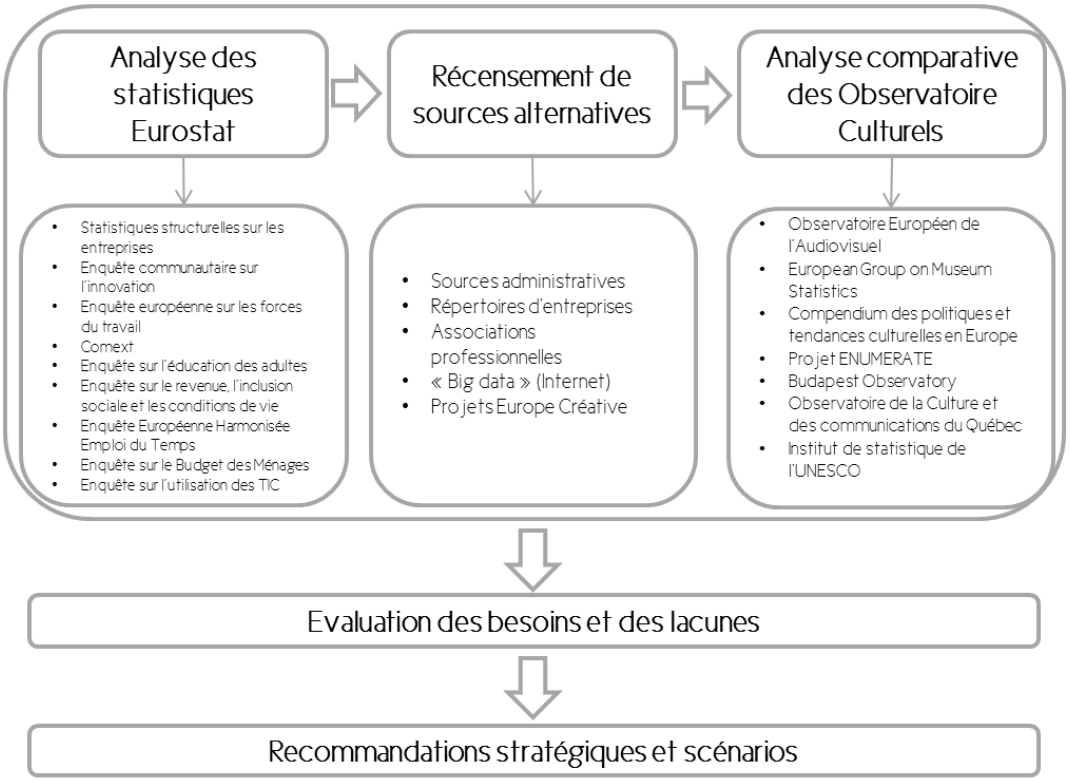
En dépit de ces efforts, la valeur économique et sociale des secteurs culturels et créatifs demeure en grande partie sous-estimée, du fait des spécificités propres au secteur : la culture et la créativité sont souvent intrinsèques aux produits manufacturés (i.e. le design d'un vêtement ou d'une voiture) ou aux nouveaux services de medias (i.e. des plates-formes numériques fournissant un « contenu » créatif comme de la musique, des jeux vidéo ou des films). En conséquence, la valeur des entreprises culturelles et créatives n'est pas capturée en manière satisfaisante par les outils statistiques, en raison de leur taille, de leur nature basée sur des projets, ou de leur valeur sociale (une caractéristique fondamentale des activités culturelles). En outre, les classifications internationales, développés depuis les années 1950 ne sont pas toujours en mesure d''apprécier' les secteurs culturels et créatifs dans leur contribution à l'innovation, au capital social et à l'économie immatérielle de manière générale. Les évolutions technologiques et sociétales posent un défi à la pertinence des systèmes statistiques adoptés pour saisir le développement d'une société de la connaissance, dépendante de talents créatifs, de valeurs intangibles et de l'innovation non technologique.

Méthodologie

Afin de « *fournir aux institutions européennes les informations nécessaires à la conception de mécanismes durables de collecte, d'analyse et de livraison des données relatives aux SCC (exception faite du secteur audiovisuel) dans l'UE*[8] » (issu des termes de références), les tâches principales suivantes ont été entreprises:

- L'analyse des statistiques officielles d'Eurostat et l'analyse des besoins et des lacunes majeures ;
- le recensement (*mapping*) de sources alternatives (i.e. outre celles d'Eurostat) comme recours aux limites des données issues des statistiques officielles européennes ;
- l'étude comparative (*benchmarking*) d'Observatoires Culturels incluant l'analyse des données collectées et leur fonctionnement comme source d'inspiration pour les futurs mécanismes de collecte ;
- l'évaluation préliminaire des besoins et des lacunes en ce qui concerne les données provenant de sources alternatives, y compris les Observatoires Culturels ;
- l'élaboration de recommandations stratégiques et de trois scenarios possibles de mécanismes de collecte de données.

[8] Le secteur audiovisuel est déjà largement couvert par l'Observatoire européen de l'audiovisuel (OEA) : http://www.obs.coe.int/fr/home



Principales conclusions

L'examen des sources d'Eurostat montre que l'Union Européenne dispose d'un aperçu encore incomplet et limité de sa capacité créative et de la contribution de ses secteurs culturels et créatifs à sa performance économique et prospérité sociale. En conséquence, les citoyens et leurs représentants politiques estiment que l'investissement dans la culture n'est pas une priorité et peinent à concevoir un lien entre la culture et l'innovation.

Pourtant, le monde entier envie aux nations européennes leur capacité à cultiver un si grand nombre de talents et à générer autant d'entreprises créatives et d'institutions culturelles dans l'architecture, la mode, la musique, le design, l'édition, la publicité, les arts du spectacle ou l'animation. Ceux-ci incarnent la qualité de vie en Europe, la diversité des cultures, mais aussi les valeurs et aspirations européennes. Cette richesse est à l'origine des succès commerciaux de nos industries fondées sur la propriété intellectuelle (les marques de luxe comme les industries du droit d'auteur) ou le tourisme culturel, par exemple, qui contribuent grandement à l'attractivité de l'Europe.

Tandis que le monde repose de façon croissante sur l'économie créative afin de générer une croissance durable, les statistiques européennes sur ces secteurs n'offrent qu'un reflet incomplet de la réalité, compliquant de fait l'élaboration de politiques appropriées. Les SCC contribuent-il à la création de valeur et à l'emploi ? Les SCC sont-ils compétitif et l'Europe est-elle à même de développer une économie créative ? Peut-on mesurer la contribution du secteur culturel et créatif à l'innovation ? L'UE déploie-t-elle assez d'efforts pour stimuler la « créativité culturelle » ? Le marché unique numérique soutient-il le développement des secteurs culturels et créatifs en Europe ? Quel est l'impact du marché unique numérique sur l'offre culturelle et sa diversité ou la participation culturelle ?

Ressembler un ensemble fiable de données est important afin de pouvoir concevoir des politiques, dans la mesure où il permet à l'UE d'identifier les atouts concurrentiels de ses secteurs culturels et créatifs et de développer une meilleure compréhension de l'évolution du marché. Ceci est indispensable si l'UE est déterminée à soutenir le développement de l'économie créative et à mieux appréhender la prochaine génération d'activités industrielles. Il s'agit également, par exemple, de mener des négociations commerciales ou des actions de promotion commerciale dans les pays tiers de façon mieux informée.

Sans davantage de ressources allouées à la collecte de données de qualité sur les secteurs culturels et créatifs, tant au niveau national qu'au niveau européen, il sera difficile d'obtenir une meilleure compréhension de ces secteurs et de leur potentiel. La mobilisation de ressources financières et humaines est d'autant moins aisée que les secteurs culturels et créatifs ne sont généralement pas considérés comme un domaine d'activité prioritaire par les organismes statistiques.

En 2014, Eurostat a lancé un programme de travail quadriennal (European Commission, 2014c) dans le but de développer et diffuser de manière régulière des statistiques culturelles en tenant compte, autant que possible, des recommandations suggérées par le groupe de travail ESSnet-Culture (2012)[9]. Le plan de travail définit l'action d'Eurostat comme suit:

- L'ouverture d'une section consacrée aux secteurs culturels et créatifs sur le site Internet d'Eurostat (déjà opérationnelle) ;
- Le développement de procédures d'estimation pour les données sur l'emploi, le commerce international des biens culturels et les entreprises ;
- La production et la diffusion de tableaux thématiques de statistiques portant sur l'emploi, le commerce international des biens culturels et les entreprises ;
- l'identification des défis et possibles solutions pour la production continue de statistiques culturelles sur le commerce extérieur de services, la participation culturelle, et les dépenses culturelles publiques et celles des ménages ;
- La publication d'un livre de poche « Statistiques culturelles » (en décembre 2015).

Il est important de fournir à Eurostat des ressources adéquates pour permettre la pérennisation de son programme de travail après la date butoir de 2018. Cependant, ce programme n'est qu'une première étape dans l'optique de relever les défis propres aux statistiques européennes, à savoir :

- La comparabilité des estimations statistiques relatives aux secteurs culturels et créatifs entre Etats membres, lesquels utilisent des définitions différentes ou des interprétations divergentes des codes statistiques internationaux ;
- Les limites posées par la mesure des activités d'un grand nombre de petites et microentreprises ;
- La mesure problématique de la valeur créée par des secteurs non industriels tels que les musées, galeries, bibliothèques, mais aussi les arts du spectacle ;
- Les difficultés à faire apparaître les redevances de droit d'auteur et de droits voisins ainsi que les actifs incorporels en général (valeur de la marque incluse) dans les statistiques officielles ;
- La difficulté tient à l'obtention de données détaillées sur les nouveaux modèles de distribution et de vente ou sur des formes innovantes d'engagement culturel via les enquêtes Eurostat (qui ne les prennent pas en compte);
- L'incapacité à mesurer la diversité culturelle (tant en termes de production que de distribution) dans les statistiques officielles ;

[9] Le réseau du système statistique européen sur la culture (ESSnet-Culture) a été lancé en Septembre 2009 pour une période de deux ans. Il a été financé par la Commission européenne. ESSnet-Culture a proposé pour la première fois un cadre méthodologique harmonisé pour guider la production de statistiques culturelles (ESSnet-Culture, 2012).

- L'exploitation limitée, par les organismes statistiques, de « *big data* » dérivé des activités en ligne afin de mieux couvrir le secteur et appréhender pleinement la valeur de l'économie créative.

La disponibilité des sources de données alternatives suggère qu'il est possible d'améliorer notre compréhension du secteur culturel et créatif.

Sources Alternative explorées	Exemples de données potentiellement accessibles
Sources administratives	Fréquentation des sites culturels/ musées/ salles de spectacle.
Répertoires d'entreprises	Données financières détaillées telles que la valeur ajoutée brute ou le pourcentage d'actifs incorporels des sociétés.
Associations professionnelles (sociétés de gestion des droits incluses)	Ventes de contenus « grand public » et local, revenus générés par les services numériques (ventes en ligne, téléchargements, streaming, etc.), collecte des redevances de droit d'auteur et distribution.
Fournisseurs de « *big data* » (Internet)	Données sur les pratiques et transactions numériques (i.e. statistiques sur les réseaux sociaux, tendances de recherches en ligne, etc.).
Observatoires culturels	Données détaillées sur des secteurs spécifiques (i.e. audiovisuel) ou des sujets (i.e. politiques culturelles, numérisation du patrimoine culturel, ressources humaines des musées, fréquentations et structures financières, etc.).

Les sources de données alternatives ne serviraient pas nécessairement à combler les lacunes structurelles identifiées dans les statistiques officielles, mais permettraient de développer une meilleure connaissance du marché de l'économie créative, ainsi que son évolution et ses performances. La collecte de données serait guidée par des objectifs et des priorités politiques définies plutôt que par des objectifs d'exhaustivité et de comparabilité difficiles à atteindre: la collecte motivée par des priorités présente l'avantage de faciliter la justification de la mobilisation des ressources financières et humaines.

Néanmoins, plusieurs limites doivent être prises en compte dans la mise en œuvre de mécanismes alternatifs de collecte de données[10].

Premièrement, la couverture géographique sera souvent limitée à quelques pays, du fait de la variabilité des ressources allouées aux activités de collecte de données d'un Etat membre à un autre.

Deuxièmement, les données n'étant pas nécessairement produites à des fins statistiques, les définitions, standards et critères de qualité (tels que le Cadre d'assurance qualité du Système Statistique Européen) ne sont souvent pas mis en œuvre par les fournisseurs de données alternatives.

[10] ***Il est très important de recueillir des données fiables et comparables dans la perspective de complémenter les statistiques officielles avec des sources alternatives. Cependant, dans le cadre de cette étude, il n'a pas été possible d'évaluer pleinement des aspects important comme l'accessibilité, la couverture, le biais, la confidentialité, etc. des sources alternatives. En outre, des recherches supplémentaires seraient nécessaires pour vérifier la pérennité et la continuité de la fourniture de données.***

Troisièmement, les données alternatives ne sont souvent pas comparables aux statistiques officielles ni entre les Etats au sein d'un même ensemble de données.

Enfin, l'accessibilité demeure un obstacle pour une variété de données. L'accès aux registres d'entreprises, en particulier, est souvent payant.

Recommandations

Le rapport propose des mesures pour remédier aux principales faiblesses identifiées dans l'étude, dans l'optique de fournir aux institutions européennes de meilleures données sur les secteurs culturels et créatifs, qualitativement comme quantitativement, et sur une base régulière.

L'objectif est de s'appuyer sur les travaux statistiques déjà réalisés tout en tenant compte des contraintes budgétaires. Ces mesures ont pour objectif de :

- Reconsidérer la classification des secteurs culturels et créatifs dans les systèmes statistiques internationaux ;
- Améliorer les statistiques officielles afin de mieux mesurer ces secteurs et en identifier les spécificités ;
- Collecter des données statistiques issues de sources alternatives en provenance des associations et organisations professionnelles, des sociétés de gestion des droits, des registres d'entreprises et le « *big data* » dans le but de mieux comprendre le secteur ;
- Affiner la qualité et la comparabilité des sources de données alternatives ;
- Fournir aux institutions de l'UE de nouveaux outils de collecte aptes à compléter les activités d'Eurostat et fournir des preuves statistiques en lien avec les politiques menées (notamment sur la participation et la diversité culturelle).

Au regard de la position concurrentielle de l'UE au niveau international, l'amélioration de l'information statistique sur les secteurs culturels et créatifs est un objectif évident.

Deux catégories de propositions sont avancées :

- Des mesures destinées à obtenir des données statistiques plus détaillées et pertinentes au regard de l'évolution du marché ;
- Des mesures pour rassembler des sources alternatives et élaborer des indicateurs à même d'assister la mise en œuvre des priorités de la politique culturelle.

Pour le second groupe de mesures, deux politiques prioritaires servent à illustrer comment les objectifs des politiques aideraient à prioriser et limiter la collecte de données. Les priorités seraient, d'une part, l'augmentation de la participation culturelle et, d'autre part, la promotion de la diversité culturelle. Fixer des politiques prioritaires est un moyen pratique de limiter et prioriser les ressources investies dans la collecte de données.

Les mesures proposées sont récapitulés dans le tableau ci-dessous:

1. Améliorer l'ensemble des informations statistiques sur les SCC	
1.1. Mieux couvrir les SCC dans les statistiques économiques	➢ Inviter Eurostat, en coordination avec les instituts nationaux de statistique (INS), à proposer des amendements aux systèmes de classification existants pour les jeux vidéo et la musique quand la révision de ces systèmes aura lieu au sein des organismes internationaux pertinents (notamment le Groupe d'experts sur les classifications statistiques internationales des Nations Unies et la Division de statistique des Nations Unies (DSNU) pour CITI/NACE)[11] ; ➢ Mieux collaborer avec les institutions nationales, les fondations et les associations professionnels afin de rassembler de meilleures données statistiques qui combleraient les lacunes existantes notamment dans l'industrie de la mode et de l'artisanat, et dans les secteurs en rapide évolution tels que la musique et les jeux vidéo ; ➢ Encourager et soutenir les efforts des INS et d'Eurostat dans leur dialogue avec les représentants de musées et de librairies (i.e. EGMUS et EBLIDA) afin de développer des définitions pertinentes et leurs capacités de collecter des données; ➢ Commanditer le développement de méthodologies adéquates afin de recueillir les données économiques clés des principaux festivals artistiques en Europe (film, musique, arts du spectacle); ➢ Confier le développement de méthodologies relatives aux « *big data* » à un centre de recherche spécialisé ou à une structure créée *ad hoc* afin d'obtenir un meilleur recensement des secteurs en question.
1.2. Améliorer les données concernant l'emploi dans les SCC	➢ Inviter Eurostat à proposer, en coordination avec les INS, des amendements à la Classification internationale type des professions (CITP), par exemple pour l'artisanat, quand la révision de cette classification aura lieu au sein de l'Organisation Internationale du Travail (OIT)[12]; ➢ Recueillir des données sur le nombre de bénévoles dans les musées, avec l'aide d'EGMUS, et tirer parti de la coopération initiée entre EGMUS et Eurostat pour adopter des méthodologies appropriées afin d'attribuer une valeur monétaire au temps des volontaires et ainsi évaluer plus efficacement la VAB du secteur muséal.
1.3. Améliorer la prise en compte des ventes et des nouveaux usages numériques	➢ Coopérer avec les associations professionnelles européennes, les sociétés de gestion de droits ainsi qu'avec les fondations et les institutions publiques comme les Observatoires Culturels, afin d'obtenir des données économiques, en particulier sur les secteurs principalement touchés par le passage au numérique (musique, édition, jeux vidéo) ; ➢ Coopérer avec les grandes entreprises et les fournisseurs de données privés tels que Nielsen (qui possède une importante base de données concernant les ventes de musique, incluant les ventes en ligne) ou avec les plateformes de commerce électronique et de streaming, pour obtenir des données plus approfondies sur les nouvelles modalités de vente du secteur (téléchargement, streaming, etc.) et sur les échanges transfrontaliers.

[11] La classification NACE est compatible avec la CITI (Classification Internationale Type, sous la garde de l'Organisation des Nations Unies - ONU). Une révision de la NACE ne peut être démarrée qu'après la révision de la CITI gérée par l'ONU. Pour le moment il n'y a pas de plans de révision de cette classification. Ces procédés de modification exigeraient plusieurs années avant qu'un accord ne soit conclu.

[12] Le dépositaire de la CITP est l'OIT et Eurostat n'a pas de pouvoir de décision pour initier sur le démarrage d'une révision de cette classification. Pour le moment, il n'y a pas de plans de révision de cette classification. Ces procédés de modification exigeraient plusieurs années avant qu'un accord ne soit conclu.

2. Développement de bases de données qui correspondent aux priorités politiques	
2.1. Données mesurant la participation culturelle	➢ Rassembler régulièrement des données sur la fréquentation sur un échantillon représentatif des plus importants musées Européens et des sites d'intérêt historique à travers l'Union Européenne sur la base des données éventuellement disponibles via les INS ou les musées/sites eux-mêmes; ➢ Collaborer avec les organismes de référence en Europe pour mesurer la participation culturelle dans le domaine des arts du spectacle (European Festival Association (EFA), Culture Action Europe (CAE); International Network for Contemporary Performing Arts (IETM); projets Europe Créative) ; ➢ Utiliser les réseaux sociaux et les données Internet (i.e. tendances de recherches sur Google) afin de suivre les nouvelles formes de participation culturelle, dans le respect de la confidentialité et des règles de protection des données ; ➢ Renforcer les capacités des fournisseurs de données alternatives, y compris les bénéficiaires du programme Europe Créative, à rassembler plus de données et de meilleure qualité sur la participation culturelle, en vue de satisfaire les exigences des indicateurs d'Europe Créative.
2.2. Données mesurant la diversité culturelle	➢ S'accorder sur une définition commune de diversité et dresser la liste des indicateurs clés par une recherche ultérieure dans ce domaine ; ➢ Utiliser les enquêtes Eurobaromètre afin de réunir un certain nombre de données régulières sur la diversité (ex : citoyens européens regardant les films en v.o.) ; ➢ Recueillir des données potentiellement récupérables sur la diversité produite, la diversité distribuée et la diversité consommée à partir de sources de données alternatives ; ➢ Collaborer avec des sociétés privées afin d'obtenir des données sur ce thème (ex : Nielsen, Spotify ou bien iTunes et la distribution géographique du téléchargement de musique/streaming) ; ➢ Enfin, mandater une institution *ad hoc* (ex : un Observatoire CCS) afin qu'elle mesure régulièrement la diversité culturelle en Europe à travers les indicateurs convenus et les sources de données existantes.

L'étude propose trois scénarios conçus comme des plans d'action destinés à améliorer la collecte, l'analyse et la livraison des données sur le secteur culturel et créatif.

Chaque scénario vise à combler les lacunes observées, ajoutant à chaque reprise une plus-value :

- Le scénario 1 a comme objectif d'assurer la pérennité du programme de travail actuel d'Eurostat et propose de continuer ce travail au-delà de 2018, afin d'assurer qu'un minimum de statistiques de haute qualité soient produites et mises à disposition.

- Le scénario 2 répond au besoin de renforcement des capacités dans l'optique de permettre l'utilisation de données alternatives. Ce scénario propose la mise en place d'une plate-forme virtuelle pour les secteurs culturels et créatifs destinée à collecter des données sur une base volontaire, ainsi que l'établissement d'un Conseil de Direction Créatif, composé principalement d'organisations professionnelles qui travailleraient avec la Commission Européenne à la collecte de données en lien avec les thèmes de politiques publiques identifiés.

- Le scénario 3 propose la mise en place d'un observatoire dédié aux secteurs culturels et créatifs dans le but d'améliorer la collecte et la comparabilité des données issues de sources alternatives, mais aussi

d'avoir recours au « *big data* » à des fins de développer de nouvelles méthodologies de recensement de l'économie créative ainsi que de mesurer des nouvelle formes de participation culturelle (i.e. par les réseaux sociaux).

Les trois scénarios ne sont pas exclusifs mais sont considérés comme des étapes successives dans une démarche qui permettrait de récolter un ensemble plus complet de données sur les SCC. Ils sont inspirés des mécanismes existants qui ont fait leurs preuves depuis quelques années à l'échelle européenne.

INTRODUCTION

Today, culture is widely recognised as a key asset nurturing both economic and social development, including well-being. The cultural and creative sectors (CCS – see Chapter 1 infra-section 1 for the definition) contribute to 3.3 per cent of the European GDP and employ 6.7 million people (3 per cent of total employment) (European Commission, 2010)[13]. Its contribution is expected to grow due to the declining role of the manufacturing sector and the gradual shift from an industrial to a knowledge and service-based economy. From a social point of view, culture strengthens individual and collective identities by preserving memories and traditions. It favours social cohesion by promoting dialogue across different cultures.

Reliable and high quality CCS statistics at European level are necessary to monitor the sector's economic and social trends and develop evidence-based policies in a wide range of areas including innovation policies.

20 years have passed since the adoption of the 1995 resolution of the European Council on the promotion of statistics concerning culture and economic growth. The 1995 resolution led to the creation of various working groups at technical levels on cultural statistics: the 'LEG-Culture' group (1997-2000) was set up, then the Working Group on Cultural Statistics (2001-2004) which led to the publication of the first Eurostat Pocketbook on Cultural Statistics in 2007, and finally the ESSnet-Culture group (2009-2011).

ESSnet-Culture was financed by the European Commission (EC), on initiative of Eurostat (the European Commission's statistical body) and its coordination was entrusted to the Luxemburg Ministry of Culture. Four task forces were established, each one headed by a Member State. Their work led to the following results: definition of a conceptual framework on culture and its economic activities based on the statistical classifications (Task Force 1); delimitation of a framework for culture statistics in the field of public expenditure and private consumption (Task Force 2); definition of a framework and identification of a methodology for the production of culture statistics in the field of business statistics and employment (Task Force 3); and inventories of sources of cultural practices and social aspects of culture (Task Force 4). Various recommendations were also issued to ensure better coverage of the sector in Eurostat surveys (particularly in relation to entrepreneurship, employment and cultural participation) as well as to ensure better harmonisation of existing data (e.g. on public and household expenditure) (Deroin, 2011; ESSnet-Culture, 2012).

Eurostat is working on the development and regular dissemination of culture statistics, taking into account, wherever possible, the recommendations proposed by ESSnet-Culture (2012) as part of a new four-year project initiated in 2014 with the support of DG Education and Culture (DG EAC). The project foresees the development of routines and estimation procedures for the production and regular dissemination of employment, international trade in cultural goods and business statistics, as well as the identification of challenges and possible solutions for the continuative production of statistics on cultural participation, international trade in cultural services, and finance (including both private and public spending on culture). This four-year project also requires Eurostat to provide *ad hoc* support for statistical projects carried out in Member States such as Satellite Accounts (SAs)[14]. Eurostat supports inter-country collaboration to share experience in this area.

[13] Similar results are found in the first EU-wide mapping of the sector carried out by KEA in 2006 (2.6 per cent of the EU GDP and 3.1 per cent of the total employed population equal to 5.8 million jobs) as well as in more recent studies on the sector: TERA (2014) finds that the CCS contribute up to 4.4 per cent of total EU GDP and 3.8 per cent of total European employment (8.5 million jobs) and EY (2014) estimates the sector's economic contribution at 4.2 per cent of Europe's GDP and 3.3 per cent of the EU's active population in terms of employment (7 million jobs).

[14] Generally speaking, a Satellite Account permits all the economic activities related to a sector in particular (CCS in this case) to show up explicitly, rather than keeping them concealed in deeply disaggregated (low level) classification of the National Accounts. This means that SAs filter the National Accounts for (in this case) culture-relevant activities in order to extract/estimate all culture-

In June 2015, a new set of data on employment and international trade in cultural goods became available on the Eurostat's website – in a new dedicated section. A more comprehensive set of information on culture statistics will be published at the end of 2015, in the new edition of the Cultural Pocketbook including three chapters on: population and socio-economic conditions, the economic dimension of culture, and participation in cultural activities and cultural consumption.

The assignment

The preparation of this feasibility study has been requested in the framework of the Regulation establishing the Creative Europe programme (art. 15) (European Parliament & Council of the EU, 2013). Also, cultural statistics have been identified as a priority field of action in the recently adopted Council of the EU's Work Plan for Culture 2015-2018 (Council of the EU, 2014).

This study has the objective to '*provide the European institutions with the necessary information to build sustainable mechanisms for data collection, analysis and delivery with regards to the CCS other than the audio-visual sector in the EU*[15]' (from the Terms of References – TOR) with a view to contribute to the development of evidence-based CCS policies.

The specific objectives are to:

- evaluate the availability and quality of data existing in different data sources at European level, including both Eurostat and alternative data sources (such as business registers, professional associations, etc.), and, when possible, cross map findings against Creative Europe's indicators (European Parliament & Council of the EU, 2013 – art. 18);
- take stock of the organisation, *modus operandi* and data collection activities from a sample of Cultural Observatories in Europe and beyond to identify best practices and potential synergies in the implementation of a mechanism(s) to provide data at European level;
- identify the needs and gaps for ensuring the availability of data with the highest possible quality;
- propose different scenarios leading to the setting up of a mechanism(s) ensuring that CCS data are made available at European level.

The Methodology

To carry out this assignment, KEA undertook the following activities:

- Reviewing existing literature on the topic;
- Screening of official statistics from Eurostat[16];

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related value added while maintaining the National Accounts structure. Therefore a thorough knowledge of the National Accounts system is needed to correctly set up these structures, and this is not straightforward.
Finland was a pioneer in this area (Ministry of Education of Finland, 2009): in 2008, it set up a Satellite Account aiming to determine the share of culture in the Finnish GDP, export, import and the domestic demand. Other EU countries have then developed Satellite Accounts for culture (Spain) or are in the process of creating one (Portugal, Czech Republic and Poland) (Cultural Affairs Committee, 2015).

[15] The audio-visual sector is already extensively covered by the European Audiovisual Observatory (EAO): www.obs.coe.int

[16] As requested by the TOR, data (both in official and alternative sources) were in particular identified along the following axes: cultural capital of Europe (i.e. number of museums and heritage sites, UNESCO sites, etc.), entrepreneurial dimension of CCS in the EU (i.e. number of companies), CCS labour market in the EU (i.e. employment, age and gender, etc.), contribution of CCS to the EU economy (i.e. turnover, value added, trade, etc.), cultural diversity and participation in Europe and (to a lesser extent due to the

- Identification of data gaps in official EU statistics;

- Mapping data from alternative sources as a possible way to address data limitations in official statistics, while taking into account their quality and comparability limits. For the purposes of this study, alternative sources are intended as sources outside (European) official statistics, ranging from administrative sources, to business registers, to trade and professional associations, to 'big data' from the Internet, to Cultural Observatories and Creative Europe projects.

- Preparation of an Excel database containing the main bibliographical resources, going from scientific articles, to methodological reports to documentation concerning Cultural Observatories and Creative Europe-supported projects.

The team also carried out interviews with experts in the field and organised a focus group (26 May 2015) to discuss main findings and preliminary scenarios together with the European Commission and the experts associated to this assignment (see full list of experts consulted and participants to the focus group under 'Resources' infra-section 1 and 2).

The KEA team was supported by Simon Ellis, former senior section leader at UNESCO Institute for Statistics, who was in charge of the data mapping. The team also worked with an Advisory Board providing inputs to develop the initial conceptual framework and comment on the final scenarios. The Advisory Board was composed of: Hasan Bakhshi, Director of the Creative Economy in Policy & Research department at NESTA; Enrico Giovannini, former Italian Minister and former Chief Statistician at the Organisation for Economic Co-operation and Development (OECD), and Andreas Wiesand, Executive Director at the European Institute for Comparative Cultural Research (ERICarts).

KEA also worked closely with Eurostat who provided KEA with the necessary updated documentation on official CCS statistics. To complement Eurostat's work, avoid duplications and maximise synergies, KEA focused its research on the identification and assessment of alternative datasets.

To assess alternative data, the metadata standards provided by Eurostat were used as much as possible. Priority was given to the following: statistical population, statistical unit, type of data/survey (sample-based or administrative), time coverage (reference years available), geographical coverage, time lag, frequency of release (annual, etc.), and sampling design in case of sample-based data. The results of the analysis are contained in a separate Excel file.

Considering the limited timeframe (six months) and resources allocated to this mission, the 'structural' limits of this study should be highlighted: first, this study covers only European official statistics from Eurostat, whilst national and sub-national data from National Statistical Institutes (NSIs) and sub-national statistical offices are out of its scope. Second, the study does not provide an exhaustive list of alternative sources. On the contrary, it identifies a number of sources across different categories (professional associations, business registers, etc.) showing their potential in terms of data available and how they could help address gaps in official statistics. It also provides a preliminary quality assessment of such sources. It is indeed very important to collect reliable and comparable data in the perspective of complementing official statistics with alternative sources. However, in the context of this study, it was not possible to fully assess important aspects including accessibility, coverage, bias, confidentiality, etc. of alternative sources. Moreover, further research would be needed to verify the sustainability and continuity of data supply. Finally, an exhaustive analysis of private

lack of valuable alternative sources in this area), financing and expenditure on culture (i.e. public expenditure and household expenditure).

databases was not possible due to accessibility restrictions. To overcome these limits, the team has relied on the consultation of experts in the field.

Structure of the study

The report is structured in three chapters:

'**Chapter 1 – CCS data sources: an overview**' presents the main features and limits of the data sources identified and analysed throughout this report, that is both official statistics and alternative data sources, including Cultural Observatories.

'**Chapter 2 – CCS data mapping**' looks more closely at the data identified under the different sources. It first presents the state-of-the-art of Eurostat's statistics in terms of data available and gaps, and then focuses on data available from alternative sources (per sector and per cross-sectoral axes: cultural capital, cultural participation, cultural diversity, trade and finance). It concludes by showing how alternative data could help address the identified gaps, whilst also presenting their limits.

'**Chapter 3 – Conclusions, recommendations and scenarios**' summarises the main findings of the report, suggests measures to improve the range and quality of CCS data in the EU, and proposes three possible scenarios to collect and deliver more and better CCS statistics at the European level.

CHAPTER 1 – CCS DATA SOURCES: AN OVERVIEW

1. Introduction

In Europe, official statistics on the cultural and creative sectors (CCS) can be obtained from National Statistical Institutes (NSIs) and Eurostat, the European Commission's statistical body which aims to produce harmonised and comparable statistics at EU level.

However, as explained further in the following chapters, official statistics do present some limits due to statistical classifications which are not adapted or detailed enough to capture the nature of cultural and creative activities, or because a great deal of important information on the sector (e.g. on heritage and museums, cultural production in cinema, publishing, arts, etc.) simply falls outside of their scope or cannot always be singled out (e.g. revenues from e-commerce activities or for different kinds of licensed rights – performance, online sales, etc.).

Beyond official statistics, there is much more data on the market than might be expected. Data on CCS can indeed be extracted from various sources (from administrative sources to professional associations to the Internet) which can provide more comprehensive and in (some cases) timely information about CCS than official statistics. Still, alternative data are often 'partial' (e.g. because they do not cover all 28 EU Member States), incomparable as well as difficult to access due to private ownership, confidentiality or privacy restrictions. It is therefore unlikely (and not really desirable) that alternative data sources replace official statistics, which are highly valued for their reliability, EU-wide coverage and comparability across countries and time.

Nevertheless, for policy makers as well as statistical bodies, alternative data represents a valuable tool to get a deeper insight into the CCS and inform evidence-based policy making, especially if their quality and comparability is improved. In the course of this mission we came across various cases of cooperation between official statistical institutions and alternative sources (see Box 1 – Destatis' project to get more and better CCS data from Cultural Observatories (Germany), Box 3 – UK Music: matching industry data and official statistics to better measure GVA in the music sector, and Box 5 – NESTA: a big data approach to measure the video games sector) which provide inspirational examples to make the most of alternative data to better measure CCS. The translation of national experiences into the European context is certainly challenging but worth exploring, taking into account the diversity of the structures and *savoir-faire* that could be mobilised across countries as well as national specificities.

This study has identified and examined relevant Eurostat and alternative sources to understand how the two could help policy makers better appreciate the characteristics and competitiveness of the sector.

The alternative sources explored include:

- Administrative sources (mainly Ministry records);
- Professional and trade associations;
- Rights management bodies and unions;
- Business registers;
- 'Big data' providers from the Internet;
- Cultural Observatories.

Two Creative Europe-supported projects devoted to data collection were also examined ('Cultural Heritage Counts for Europe' and the European Jazz Network) as a possible additional source of information on the sector, particularly to feed into Creative Europe's indicator requirements. These are integrated in Chapter 2.

In addition to this, other sources which do not necessarily fall into the above mentioned categories are referred to in the study, when relevant (for instance, international surveys carried out by private companies).

Before going into the details of the data available per sector from the identified sources, the main typologies of sources explored in this study (official and alternative) and major limits are shortly presented below.

2. Analysed data sources

2.1. Official statistics

At the European level, Eurostat has the responsibility to provide statistical information to the institutions of the EU to promote the harmonisation of statistical methods across its Member States and candidates for accession as well as EFTA countries. Eurostat therefore has a major coordination and harmonisation role, as primary data collection is mainly carried out at national level by NSIs (i.e. Eurostat's surveys collect data from NSIs who in their turn collect data from national surveys or other sources such as business registers or administrative sources).

Data from Eurostat's surveys are expected to be the most accurate and comparable on the market. Statistical offices are indeed devoted to producing data following the highest statistical standards as set in the Quality Assurance Framework of the European Statistical System (ESS, 2012).

However, various issues make official statistics on CCS problematic. Needs and gaps will be more extensively presented in Chapter 2, but several points deserve to be highlighted:

- Culture is not a sector from a statistical viewpoint, meaning that the sector and related occupations are not readily sized by international statistical standards: NACE[17] and ISCO[18] codes often aggregate too many activities which are only 'partially' cultural. Extracting the 'cultural' part from each code is a major challenge both for cultural experts and professionals (who should correctly define cultural activities) as well as statisticians (who should make sure that the correct proportion of 'cultural activities' is identified and extracted from the relevant statistical codes);

- The sector is composed of a high number of small and micro-companies[19] (estimated at 90 per cent of the sector). These are very difficult to measure statistically as they may be 'informal' and their income may be undeclared to tax regimes. If these issues can maybe be ignored for other sectors, they cannot in CCS as micro-companies represent its 'core', and even more with the development of the Internet;

- As culture is rarely a priority for statistical offices (the UK is for instance an exception), statistical bodies have not engaged much in delivering sufficient levels of details for data on CCS (e.g. ISCO

[17] NACE is the European industry standard classification system consisting of a 6 digit code.
[18] The International Standard Classification of Occupations (ISCO) is an International Labour Organization (ILO) classification structure for organising information on labour and jobs.
[19] "*A microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million*". Source: Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises [Official Journal L 124 of 20.05.2003].

should be delivered at least at 4-digit level but not all countries do, see Chapter 2 infra-section 2.2) or in processes leading to the revision of international standards[20];

- Estimates from countries are often difficult to compare due to different definitions used, which may cover sectors such as gastronomy (not included in the ESSnet's definition) or even include the same sectors[21] to a different 'extent': for instance, whilst ESSnet includes only one NACE code for video games, UK and Sweden include two. Similarly, whilst UK and Sweden include three NACE codes to measure advertising, ESSnet only includes one[22];

- Finally, CCS do not only have economic value. The cultural richness of Europe is also about its greatly diverse offer of museums, theatres, films, concerts, books, etc. which are 'ingredients' contributing to creativity and thus to the development of CCS and the EU innovation capacity. Detailed data on cultural production, genres, etc. that would help measure the cultural capital and diversity of Europe are simply outside the scope of European official statistics.

2.2. Alternative data sources

Administrative sources correspond to sources arising from the public administration (at national, regional or local level) or private sector programmes when required to collect certain information to implement an administrative regulation. Administrative sources include, for instance, tax data, social security data, health/education records, local council registers, published business accounts, internal accounting data as well as data held by private businesses such as credit agencies, telephone directories, retailers with store cards, as well as (amongst others) administrative records of admissions/tickets sold in cultural heritage sites and institutions, such as museums, libraries or archives, often centralised by national ministries.

Administrative sources therefore contain data which is not primarily collected for statistical purposes but which is often viewed as a reliable source of data to compile official statistics. Although the use of administrative sources is already common practice amongst statistical bodies, the major issue here is that methodologies to collate data and definitions may vary a lot as they depend on national systems. Also, administrative data are generally difficult to access.

Professional and trade associations representing the CCS, organised either at the national and/or EU level, dispose of various kinds of data (employees, turnover, consumer habits, etc.). Data is often collected to inform members on market evolutions and trends, for instance in relation to the emergence of new sale services and delivery channels (e.g. streaming services). These data can also be used for advocacy purposes.

Publishing, video games, music and architecture are the sectors in which professional and trade associations' contribution to data collection can be the most valuable. Professional and trade bodies indeed exist for these

[20] Such processes would involve Eurostat, NSIs as well as international bodies, notably UNSD and ILO. The United Nations Statistics Division (UNSD) serves under the United Nations Department of Economic and Social Affairs (DESA) as the central mechanism within the Secretariat of the United Nations to supply the statistical needs and coordinating activities of the global statistical system. The International Labour Organization (ILO) is a United Nations agency dealing with labour issues, particularly international labour standards, social protection, and work opportunities for all. 185 of the 193 UN member states are members of the ILO.

[21] A different classification system has been proposed in the UK, based on occupations rather than sectors (NESTA, 2013).

[22] Codes included under the ESSnet's definition for video games: 58.21 Publishing of computer games (fully cultural); Codes included in UK and Sweden: 58.21 Publishing of computer games (fully cultural), and 62.01 Computer programming activities (partially cultural – it includes "Ready-made interactive leisure and entertainment software development" but also other programming activities not included in the video games definition). Codes included under the ESSnet's definition for advertising: 73.11 Advertising agencies (partially cultural); Codes included in UK and Sweden: 70.21 Public relations and communication activities (only UK), 73.11 Advertising agencies and 73.12 Media representation (all partially cultural) (Oliver & Ohlbaum Associates Ltd., 2013).

sectors, acting both at national and European/international levels and regularly collecting data from their members (e.g. the Federation of European Publishers – FEP, the International Federation of the Phonographic Industry – IFPI, the Architects' Council of Europe – AEC and the International Software Federation of Europe – ISFE).

The geographical and sectoral coverage of these data, however, may be limited (e.g. because not all businesses in the sector/EU countries join the relevant association), which ultimately affects their representativeness. Also, data availability may be limited to 'aggregated' data due, for instance, to comparability issues (e.g. as data coming from national associations of publishers are mostly incomparable, FEP publishes only aggregated figures on the sector to give an idea of the global sector's performance while avoiding national comparisons which may not be well founded).

Rights management bodies (Collecting Societies), who collect royalties for certain uses of copyright works as part of their mission, primarily gather two kinds of data: 1) the number of artists/authors registered with the Collecting Societies (CS) and theoretically also those who are not registered but are entitled to payment according to the Directive 2014/26/EU (European Parliament & Council of the EU, 2014 – art.7), and 2) the revenue that the artists/authors receive for different uses, including uses in third territories (in virtue of the so called 'reciprocal representation agreements'). Directive 2014/26/EU on collective rights management and multi-territorial licensing of rights in musical works for online uses has put forward common rules for the governance, financial management, transparency and reporting of CS. However, comparability and quality of data from CS remains problematic. Reporting systems are still very different and various duplications can be found (for instance because the same artist can be registered with different CS in different countries).

Business registers include detailed data on business units (e.g. R&D, design, and marketing) along with management structures and accounting data, for instance on purchases. Such data can be purchased or surveyed or retrieved from companies' registration and financial accounts' forms. At European level, Amadeus[23] (Bureau van Dijk) and BACH[24] (Bank for the Accounts of Companies Harmonized, Banque de France) are widely-used and representative business registers (9 million companies in Amadeus and over 70 per cent coverage of certain sectors at national level in BACH). However, business registers are often accessible only against the payment of a fee.

Business registers may be used to obtain more detailed data than those available from official statistics (e.g. on design units in manufacturing companies) but also more accurate classification of companies (within the limits of confidentiality). In the course of this study, the European Audiovisual Observatory (EAO) reported that they made use of the EU-wide commercial business register Amadeus to correctly identify audiovisual companies in Europe. '*In the Amadeus+ version elaborated by the Observatory, around 30,000 companies have been re-indexed by main activity in order to provide more precise classification and aggregates according to the NACE Rev.2 nomenclature. We have also included information on public broadcasting organisations. Amadeus+ allows the Observatory to make structural business statistics on the audiovisual sector with a rather high level of accuracy*[25]*'.*

Although the integration of business registers' data into official statistics remains a challenging task (as business register do not follow Eurostat's standards), the lobby group UK Music provides a good example in this sense: they matched data of members with the official government business register (IDBR) to better

[23] https://amadeus.bvdinfo.com/version-201579/home.serv?product=amadeusneo
[24] https://www.bach.banque-france.fr/?lang=en
[25] From email exchange with EAO (3 April 2015).

calculate the Gross Value Added (GVA) [26] of the sector (see Box 3 – UK Music: matching industry data and official statistics to better measure GVA).

'Big data', characterised by their high volume, variety and velocity (the 3 'Vs'), are defined as data that cannot easily be managed and analysed using conventional tools, such as relational databases or desktop statistical packages. These features create challenges to their treatment and interpretation, as 'big data' feature a completely different nature compared to, for instance, survey-based data (e.g. collected on a selected sample, in a specific moment in time) (see, for instance, Landefeld, 2014).

The Internet is certainly a major source of 'big data' (but not the only one – others are, for instance private databases of big stores collecting thousands of records on their clients daily). In the last few decades, Internet and new technologies have indeed become not only the 'enabler' of new social and economic practices for the CCS but also a means to measure their latest trends and evolutions in a fast-changing environment. Whilst traditional statistics generally take several years to prepare, by 'mining' digital sources it is, at least theoretically, possible to describe a wide range of socio-economic phenomena in near real time.

On the supply-side of the economy, new mapping methodologies are using big data to help track the emergence and growth of industrial sectors (NESTA, 2014a; Nathan & Rosso 2013) occupations (Mandel, 2012) skills needs (Frey & Osborne, 2013) which may not be captured by official classifications and traditional data sources. This is all important in sectors like the CCS, which have disproportionately high numbers of self-employed, freelancers, Unorganised Content Providers (UCP) and micro-companies that are poorly served by official statistics and are subject to important changes across the value chain (see also Box 5 – NESTA: a big data approach to measure the video games sector).

On the demand-side, sources of big data, such as those extracted from social media platforms, may be a rich complement to traditional surveys to capture cultural participation in all its forms (NESTA, 2012) (including with digital culture). Private datasets of a very different nature (going from datasets of e-commerce players such as Amazon which has an unrivalled bank of data on online consumer purchasing behaviour to Nielsen which has set up a system to regularly track music consumption behaviour in various countries in the world, both in-store and digitally) can also help better seize how people today engage with culture (for instance, sales of e-books are not available from traditional trade sources). However, these data are either not readily accessible or not accessible for free.

Although for the time being 'big data' cannot be integrated in official statistics, their potential to complement official statistics and serve policy objectives is increasingly explored by international institutions and statistical offices[27].

[26] Gross Valued Added is a measure of the degree to which a company adds value by transforming its inputs into a final product. It is assessed either by measuring the difference between the monetary value of a company's products and its inputs, or by measuring the difference between prices and income. Inputs to this indicator include; prices, incomes of producers, company data on the value of supplies and production, and labour costs.

[27] In 2014, the European Commission (DG CONNECT) commissioned the study 'Data for policy: big data and other innovative data-driven approaches for evidence-informed policymaking' (ongoing) as part of its Big Data strategy (European Commission, 2014a; 2014b).
In 2014, the UN Secretary-General Ban Ki-moon named an Independent Expert Advisory Group on the Data Revolution for Sustainable Development (http://www.undatarevolution.org/) which resulted in a report exploring the potential of 'big data' to help governments succeed the United Nations Millennium Development Goals (MDGs) (UN Data Revolution Group, 2014).
The OECD is currently undertaking extensive analysis on the role of data in promoting innovation, growth and well-being within its multi-disciplinary project on New Sources of Growth: Knowledge-Based Capital (KBC) (OECD, 2013) (http://www.oecd.org/sti/ieconomy/data-driven-innovation.htm). The objectives of the project are to improve the evidence base on the role of data for promoting growth and well-being, and provide policy guidance on how to maximize the benefits of the data-driven economy, while mitigating the associated risks.

Cultural Observatories are here defined as culture-specific bodies which collect data (both quantitative and qualitative) on the CCS on a regular basis, either in a permanent or temporary form, with a view to support cultural policy-making and research. In a way, cultural foundations also fall into this category whenever they carry out data collection activities (for instance, Boekman Foundation[28] who has initiated the Arts Index Netherlands project together with The Netherlands Institute for Social Research).

In the context of a study aiming at improving the collection, analysis and delivering of better CCS' statistics to support evidence-based policy making, Cultural Observatories represent a very interesting type of organisation to be studied.

Cultural Observatories play a crucial role as 'information brokers' in the transfer of knowledge from researchers/scholars to cultural policymakers (Ortega, 2011; Ortega & Melba, 2012). In addition to collecting and making available data on the sector, Cultural Observatories indeed provide knowledge and expertise which assist the analysis of the information gathered either by the observatories themselves or statistical institutes. Their data collection activities combined with more research-oriented or, in some cases, capacity building services may result particularly helpful to better grasp the specifics of this sector (e.g. dominated by very small companies and led by project-based work) and for the development of appropriate support policies.

In Germany, an interesting project is currently going on aiming at making the most of Cultural Observatories' data and expertise to support policy making, while ensuring statistical accuracy.

Box 1 – Destatis' project to get more and better CCS data from Cultural Observatories (Germany)

The German Federal Statistical Office (Destatis) is working on a three-year project (2014-2016) with Cultural Observatories in Germany to get more and better data on CCS, under the request of the Federal Government. Data from Cultural Observatories will be assessed and analysed to produce sectoral reports (the first one will be on music). In the long-term, the objective is to improve the quality and comparability of the data collected by Cultural Observatories in Germany by introducing greater harmonisation in their data collection processes.

The initiative involves around 20 Cultural Observatories (national and local) who accepted enthusiastically to participate on a voluntary basis. They are asked to provide data, whilst a quality check is performed by Destatis who will then formulate recommendations to improve data collection and possibly integrate data from cultural observatories in one statistical system.

The project is financed by the 'Standing Conference of the Ministers of Education and Cultural Affairs of the 'Länder' in the Federal Republic of Germany' and the 'Federal Government Commissioner for Culture and the Media'.

For this study, a sample of Cultural Observatories was selected for a more in-depth analysis (see next infra-section) to identify the type of data collected by these organisations as well as understand their *modus operandi* as a source of inspiration for the mechanisms of data collection, analysis and delivery to be developed in the scenarios.

The Australian Bureau of Statistics has recently prepared a 'Big Data strategy' and started the 'ABS Big Data Flagship Project' which is intended to coordinate R&D effort that will build a sound methodological foundation for the mainstream use of 'big data' in statistical production and analysis (Tam & Clarke 2015).

[28] http://www.boekman.nl/en

2.3. A focus on Cultural Observatories

As part of this research, seven Cultural Observatories were examined in detail, namely:

- The European Audiovisual Observatory (EAO)[29], a public service organisation created in 1992 and managed under an Enlarged Partial Agreement of the Council of Europe (CoE)[30], by 40 Member States and the European Union. It has the mission to collect data and provide a better understanding of the audiovisual sector in Europe;
- The European Group on Museum Statistics (EGMUS)[31], born in Berlin in 2002 as a non-profit organisation. EGMUS gathers experts in the field of museum statistics and policy with the aim of collecting, promoting and publishing comparable statistical data on museums;
- The Compendium of Cultural Policies and Trends in Europe (Compendium)[32], a non-profit and web-based partnership organisation founded in 1998 as a joint venture between the Council of Europe and the European Institute for Comparative Cultural Research (ERICarts). Compendium regularly collects and analyses information on national cultural policies in Europe. It also collates quantitative data on cultural participation, public funding of culture, cultural trade, employment and prices from existing sources (mainly Eurostat, OECD and national governments);
- ENUMERATE[33], a three-year project (2011-2014) funded under the ICT-PSP programme of the European Commission to collect data on the digitisation of cultural heritage institutions in Europe, now passed under the umbrella of the European platform "Europeana"[34] and, more specifically, the EU-funded project Europeana v3.0 (CIP-ICT-PSP-2013-7), which runs until May 2015;
- The Regional Observatory on Financing Culture in East-Central Europe (or Budapest Observatory, later referred to as 'BO'), a non-profit Foundation focused on Central and Eastern Europe, but its geographical scope keeps expanding. Approximately once per year, BO collects qualitative data (opinions) on cultural policies in European countries (e.g. problematic factors). The Observatory also publishes monthly newsletters in which it analyses and comments on data coming both from statistical offices and other sources such as festivals, professional associations, European funding programmes, etc. BO is also involved in festival statistics and research projects at national level (Hungary);
- The UNESCO Institute for Statistics (UIS)[35], a semi-autonomous organisation, established in 1999 as the statistical body of UNESCO. It has the mission to develop common methodologies and standards, collect and analyse data to monitor trends at national and international levels (on CCS in general or specific topics such as feature films and employment), and provide statistical capacity support to member states;
- The Observatoire de la culture et des communications du Québec (OCCQ)[36], a governmental body founded in 2000 and working under the umbrella of the Québec Statistics Institute (ISQ). Its mission is to produce, analyse and disseminate statistics in the field of culture and communication in Québec (e.g. on several dimensions, such as cultural participation, public funding for culture, art sales, etc.).

[29] http://www.obs.coe.int/
[30] 'Partial agreement' is a term used within the Council of Europe to refer to a major activity of European cooperation that is organised by the Council of Europe but does not include all of its member states. Any expenditure would be made by the participating states alone.
[31] http://www.egmus.eu/
[32] http://www.culturalpolicies.net/web/index.php
[33] http://enumerate.eu/
[34] European digital platform giving access to various types of cultural contents (e.g. image, texts, sounds, videos): http://www.europeana.eu/portal/
[35] http://www.uis.unesco.org/Pages/default.aspx
[36] http://www.stat.gouv.qc.ca/statistiques/culture/

The sampled Observatories were reviewed across five dimensions: mission and scope, organisational and governance framework, resources, products delivered and data collected. The main findings are summarised below. An email survey was run to gather this information (the questionnaire used can be found in Appendix 2).

Mission and scope: Cultural Observatories generally aim at contributing to better knowledge and understanding of the CCS with a view to serve policy-making and/or research objectives. They nonetheless differ in their temporal, geographical and sectoral scope. Observatories can indeed have a temporary (ENUMERATE) or more permanent nature (all the others analysed). Geographical scope can also greatly vary and be European (EAO, ENUMERATE, Compendium, EGMUS), 'regional' (Hungary and Central and Eastern Europe for Budapest Observatory, Québec for OCCQ) or 'global' (UIS). Finally, sectoral scope can be restricted to one domain (the audiovisual/cinema sector for EAO and UIS[37], museums for EGMUS, cultural heritage for ENUMERATE) or cut across various sectors (BO and Compendium with focus on policies, and OCCQ.).

Organisation framework and governance: the organisational structure of Cultural Observatories is often composed of three 'bodies':

- A decision-making body, normally a pluralistic body that may include representatives of member states (EAO) or regions (OCCQ), project's partners and/or associated national experts (EGMUS, ENUMERATE, Compendium/ERICarts, BO), or international experts (UIS). Members of the decision-making body are often members of the 'executive staff', in charge of implementing the organisational mission, suggesting that horizontal coordination is preferred over hierarchical control. Decision-making processes can be more or less linked to public bodies. In this sense we can distinguish between "independent observatories" like Budapest Observatory, ENUMERATE, and EGMUS and observatories more or less formally attached to public institutions, namely Compendium and EAO (attached to the CoE), UIS (attached to UNESCO), and OCCQ (attached to the Québec Statistical Institute).

  EAO is the sole observatory amongst those analysed where the European Union contributes to decision-making as the EU is one of the EAO's members together with 40 state parties.

- An advisory body, where existing (EAO, ENUMERATE and OCCQ), is commonly composed of experts advising the Cultural Observatory on its research and data collection activities.

- A 'core team' including the management and research staff.

Resources: on average, the analysed observatories count on a relatively small team – going from a minimum of 1-2 (ENUMERATE and EGMUS) to 4 at UIS, 8 at Compendium and 9 at OCCQ – with the exception of the EAO that employees a team of 23 people (see Table 1 – Cultural Observatories: human and financial resources).

They are mostly funded by public institutions at different level (regional, national, international), with annual budgets going from € 10,000 (EGMUS) to € 3.2 million (EAO) per year (see Table 1 – Cultural Observatories: human and financial resources). Funds may indeed come from regional/national governments (Québec province for OCCQ, Germany for EGMUS), international organisations (Council of Europe for Compendium and EAO, UNESCO for UIS), or *ad hoc* public grants (European ICT-PSP programme for ENUMERATE; *ad hoc* funds for BO and EGMUS). EAO is the only Observatory, amongst those analysed, drawing revenues from private sources (e.g. sales of publications or advisory and research services).

[37] As regards direct data collection. However, UIS covers all CCS when it comes to methodological reports or *ad hoc* studies (e.g. CCS' mappings).

The allocation of resources accurately reflects the different scope and degrees of ambitions in data collection and analysis. Observatories with greater human and financial resources are indeed those who regularly perform these kinds of activities, mostly at international scale (EAO, Compendium, UIS, ENUMERATE and OCCQ at regional level). The other Cultural Observatories examined work with more modest resources, often allocated only on occasion (BO, EGMUS), meaning that the scope and quality of the data collected can vary importantly from one year (or country) to another.

Table 1 – Cultural Observatories: human and financial resources

Cultural Observatories	Human resources	Financial resources
Budapest Observatory (BO)	– **3 people** (director, assistant and researcher) – **network of external experts** for *ad hoc* missions	Variable – between **€ 10,000 and € 30,000** per year Source: European project grants (e.g. Creative Europe Programme, Council of Europe), and *ad hoc* national grants.
Compendium of Cultural Policies and Trends in Europe (Compendium)	– **8 people** (2 editors from the CoE and ERICarts + management staff, researchers and support staff) – an **80-member Assembly of national experts** contributing to data collection and analysis	Variable – between **€120,000 to €150,000** per year Source: almost exclusively public from the CoE (except for marginal donations). Several ministries of culture also contribute individually.
ENUMERATE	– **1 project coordinator** (Lead Partner) – **10-partner Consortium** (including both public and private organisations specialised in heritage digitisation)38 – **3-member Advisory Group** (national experts) – **29 National Coordinators**	**€ 593,860** (3-year budget for the whole project 2011-2014)[39] Source: ICT-PSP programme of the EC + partners' co-funding.
European Audiovisual Observatory (EAO)	– **23 people** divided in two branches: the Department for Information on Markets and Financing and the Department for legal information – **network of data suppliers** in member states (over 1,000 contacts)	Around **€ 3.2 million** per year Source: annual contributions of the members (state parties and the EU) + commercial activities (25-30% of the budget).
European Group on Museum Statistics (EGMUS)	– **1-2 people** organising the activities of the national coordinators – **network of national coordinators** (50) contributing to data collection	Variable – between **€ 12,000 to € 15,000** per year Source: ad hoc national grants (mainly German government).
Observatoire de la Culture et des communications du Québec (OCCQ)	- **9 people** (director + 8 researchers) - **other experts** from the QSI that the team can rely on when needed	Around **€ 928,000** per year[40] Source: Québec government.
UNESCO Institute for Statistics (UIS)	- **4 people** (director + 3 researchers) - **network of external experts** for *ad hoc* missions	Around **€ 450,000** per year[41] Source: UNESCO member states and contributions from donors.

[38] For more information see http://www.enumerate.eu/en/about_enumerate/partners/project_consortium/
[39] The 2015 budget is part of the Europeana's budget, but it was not possible to obtain the exact amount allocated to ENUMERATE's activities.
[40] As converted in April 9th, 2015, from C$1,25 million.
[41] As converted in April 9th, 2015 from C$12 million.

Technical resources used to collect, process and analyse data go from simple text editors to prepare questionnaires and Excel (all Observatories) to more sophisticated data collection tools and statistical software (e.g. LimeSurvey[42] for ENUMERATE, CATI[43] survey software for OCCQ, and SPSS or other *ad hoc* software – for instance a special software was developed to manage the Hungarian Festival registry set up by BO, see Box 6 – Festival statistics: the methodologies developed in Finland and Hungary).

Products delivered: the examined Observatories deliver similar products, mainly including databases/tables containing the collected data. These are generally published online and available in many different formats, within the limits of copyright and confidentiality provisions of data providers. These tables are often presented in a user-friendly way and allow easy comparisons between countries and/or across time. Compendium, for instance, makes available data from statistical bodies or other international organisations (e.g. Eurostat, OECD) in the form of comparative tables. Such way of delivering 'easy-to-access' data constitutes a specific added-value of (Cultural) Observatories.

The analysed Observatories also provide online newsletters and regular memos as well as country-specific annual reports, or project/seminar reports. Specific tools have in some cases been developed, such as the ENUMERATE's benchmarking tool[44] which allows institutions to assess their performance in collections' digitisation in comparison with other countries and similar institutions in Europe.

The majority of products are freely accessible online, in keeping with the observatories' mission to contribute to knowledge production and dissemination. The only exception is EAO, which has been successful at establishing a public-private business model. Private revenues mainly come from the sale of its annual reports (which provide various kinds of data: e.g. audiences, sales, attendance etc. on television, cinema, video and on-demand audiovisual services in Europe) or sector-specific studies.

Dissemination is ensured through online data platforms/websites, regular newsletters and bulletins, social media, and, occasionally, paperback reports (EAO).

Data collected: The Budapest Observatory is the only Observatory amongst those analysed that collects only qualitative information (opinions on cultural policies), although it regularly comments on quantitative data retrieved from other sources. Compendium (national cultural policies, public funding for culture) and EAO (laws on the sector and a wide range of markets data) collect both qualitative and quantitative data.

A number of dimensions and activities are being monitored by the Observatories, including attendance at cultural events/institutions, price of cultural goods and services, public expenditure, sales and acquisitions, turnover/revenues as well as digitisation (i.e the introduction of technological innovations in museums, museum archives' digitisation, or digitisation of cinemas). These data are more extensively described in the table below.

In the sampled Cultural Observatories, data collection is carried out through a centralised, decentralised or what can be called a 'mixed' model. In the centralised model (BO, OCCQ, UIS) an internal research team collects data under the supervision of a director. In the decentralised model (ENUMERATE, Compendium, EGMUS), the internal team supervises the collection work of national experts, civil servants or independent experts/scholars. In the 'mixed' model, (EAO) data are collected both through a decentralised network of data suppliers and by the internal team through direct contacts with relevant institutions and professional

[42] LimeSurvey is a web tool to design, publish and collect responses to online & offline surveys
[43] Computer-Assisted Telephone Interview is a telephone surveying technique in which the interviewer follows a script provided by an application to conduct the interview.
[44] http://enumeratedataplatform.digibis.com/benchmark/

associations (such as the European Broadcasting Union). The EAO team also makes use of the private business register Amadeus to obtain more accurate data on the sector (see also infra-section 2.2). Decentralised and mixed models seem to work best especially when large geographical areas need to be covered. In Europe, these two models enable Observatories to make the most of existing data sources (at local and European level) and to ensure a wide coverage of EU countries.

Quality and comparability issues: overall, the data presented by Cultural Observatories are accurate, often within the limits of the accuracy of the information provided by the data suppliers and respondent institutions, and the resources allocated to data validation (more important at EAO, UIS and OCCQ). Comparability often remains an issue as data may come from different (and incomparable) sources and samples and methodologies may change across time.

Table 2 is a summary of the data collected directly by each of the Observatory examined, and major needs and gaps identified in relation to quality and comparability of such data. More detailed information on data sources, statistical population, statistical unit, sampling design, geographical coverage, time coverage, partnerships established, frequency of release, accessibility conditions and comparability issues per type of data collected is available in Appendix 3 – Information sheets on Cultural Observatories. All the information sheets were double-checked and validated by the seven Observatories analysed and consulted for this mission.

Table 2 – Cultural Observatories: overview main data collected and main gaps

Cultural Obs.	Main typologies of data collected and sources[45]	Quality & comparability issues
BO	Performance of national cultural policies according to experts' opinions (qualitative data) Source: opinion survey run by BO	Quality/reliability and comparability issues across time inherent to opinion surveys based on voluntary contributions (e.g. countries are not equally represented). Also, some questions have changed due to the 'experimental' nature of the first two editions.
	Various data (programme, audience, employees, etc.) on festivals in Hungary Source: national festival registry compiled by festivals in Hungary on a voluntary basis	The same data are collected over time by the registry, but participation is voluntary so comparison across time is not always possible.
Comp.	Price of cultural goods and services (CDs, books, films, music lessons etc.) Source: market data collected by experts from available sources (e.g. the Internet)	Comparability for goods is not possible as the sample differs from one year to another (different books/CDs released).
	Governmental expenditure on culture (at national, regional and local level) from administrative sources Source: official data published by NSOs	Comparability of single countries across time is possible, while comparability at European level may become difficult due to differences in accounting systems.
EGMUS	Various data (museum attendance, types of collections, financing and expenditure – origin/destination and amount, staff – FTE, volunteers, part-time, seasonal workers etc., technological innovations – equipment,	Geographical and time coverage is very sparse as data is not regularly submitted by all EU countries. Despite the fact that data are (at least theoretically) collected through a pan-European Standard Questionnaire set up by EGMUS, comparability is limited. This questionnaire is indeed not

[45] For more information on the typologies of data collected, data collection methodology and hyperlinks to publicly available data and related sources, see information sheets in Appendix 3.

	scope of digitisation, online access, etc.) Source: administrative data from national ministries (or other relevant national organisations) collected through a standardised pan-European questionnaire	systematically applied at national level and the scope of the data sources used in the partner countries may importantly differ across countries (e.g. data sources may cover only state-owned museums).
ENUMER.	Various (digitisation activity – type and volume of collections digitised, cost of digitisation efforts – category of activity and human resources allocated, access to digitised heritage collections, preservation of digital heritage materials e.g. compliance with preservation strategies or standards) Source: data (based on real figures or estimates) collected through standardised pan-European surveys run three times until now (2012, 2013, 2014)	The use of a harmonised pan-European survey including a number of core and stable questions should ensure comparability of data over time (three editions run since 2012). However, the sample of memory institutions used is not entirely representative of the different typologies of institutions in the EU[46].
EAO[47]	Public funding devoted to the promotion of film and audiovisual works established in Europe (source, kind of activity supported and number of beneficiary projects) Source: bodies making such funding available across Europe	All European film funds are tracked with the exception of some minor local funds without established permanent schemes. Accuracy is ensured within the limits of the data available, which may vary from year to year. Comparability over time and across countries is possible.
	Admissions to films in European cinemas Source: specialised national sources, and the MEDIA Programme	It is estimated that about 87% of total admissions in Europe are covered. However, coverage rates and data collection methodologies vary between countries and across time.
	Database of TV channels and on-demand services by geographical coverage, country of establishment and availability of service, genre, language, ownership (private/public), etc. Source: various (regulatory authorities, trade press, Internet, etc.)	Comparability over time is not possible from the database (as it does not contain historical data) but it is possible from the Yearbook (which is not free-of-charge).
UIS[48]	Film statistics (box-office per country, linguistic diversity, country of production, distribution mechanisms) Source: data collected by national organisations responsible for cinema statistics	Data are overall good and comparable.
	Cultural employment survey (pilot) Source: NSIs	The 'official' survey is being prepared based on the results of the pilot.

[46] In the ENUMERATE approach a representative sample across all cultural heritage domains {*Archives/ Record Offices*, *A-V / Film Institutions*, *Libraries*, *Museums*, *Other*} is the starting point, and a weighing mechanism is used to determine a representative sample per domain and per country. However, after extended consultations with relevant stakeholders, it was decided to make the ENUMERATE Core Survey an open survey. This complicates the task of making the collected data representative. For more information, see ENUMERATE surveys and related methodology at: http://www.enumerate.eu/en/surveys/.

[47] Only data from main databases – many others are collected.

[48] In addition to data collection, methodological and research assignments are regularly carried out. For instance, UIS is the author of several methodological papers aimed at setting standards and improving data quality in the field of CCS (http://www.uis.unesco.org/Culture/Pages/default.aspx). UIS also carry out various mappings/analysis of CCS based on existing data (see, for instance, a study on CCS in Serbia (UIS, 2015): http://www.uis.unesco.org/culture/Pages/fcs-case-study-serbia.aspx).

OCCQ	Cinema attendance in Québec (ticket price, number of projections, occupancy rates and box office revenues) Source: data collected through a survey submitted to cinemas in the Quebec region	No major gaps or comparability issues identified.
	Sales of new books from bookshops, distributors and publishers (to individuals and organisms) in Québec Source: data collected through a survey submitted to booksellers in the Quebec excluding large retailers	An important data revision in 2012 means that monthly data for bookstores before 2011 is no longer available and certain data tables found in publications printed before 2012 are no longer valid. A methodological change in the calculation of distributors' sales for widespread distribution beginning in 2007 results in a breakdown of these sales between superstores and other points of sales not being comparable with the breakdown before 2007. Totals remain valid.
	Museum attendance by type of visitor and institution in Québec Source: data collected through a survey submitted to 440 museum institutions in Quebec	No major gaps or comparability issues identified.
	Quebec Municipalities' expenditure on culture Source: data collected through a survey submitted to 1,111 municipalities in Québec	For municipalities with less than 100,000 inhabitants, data are accurate and comparable within the limits of estimates for smaller municipalities (which represent the majority of the municipalities in the region).
	Quebec's public expenditure on culture Source: data collected through a survey submitted to all departments, ministries, agencies, commissions, boards, special funds and government business enterprises of Quebec that have cultural expenditures	No major gaps or comparability issues identified.
	Attendance at performing arts (venues and shows) in Quebec Source: data collected through a survey submitted to all performing arts venues in Quebec	No major gaps or comparability issues identified.
	Artwork acquisitions (type of buyer, value and provenance of the work) in Quebec Source: data collected through a survey submitted to selected institutions	Data is overall comparable over time (within the core collecting organisations considered). The survey is not exhaustive as organisations that acquire artworks sporadically are not included.
	Sales of sound recordings (physical/digital, artistic/non-artistic) in Quebec Source: Nielsen (private)	Data is accurate and comparable over time, within the limits of the selected titles (which do not represent the overall sales of sound recordings)
	Sales of videograms (media support, first market and country of origin) in Quebec Source: Nielsen (private)	No major gaps or comparability issues identified.

CHAPTER 2 – CCS DATA MAPPING

1. Introduction

The objective of this chapter is to provide a clear picture of the data available on CCS both from official statistics and alternative sources, as identified in Chapter 1.

The definition of CCS in the EU was established by ESSnet-Culture[49] (2012). This was later used to define eligible sectors in the Creative Europe programme[50].

In this study, CCS statistics are approached by 'domain' as listed by ESSnet, namely: heritage (including museums, historical places, archaeological sites and intangible heritage), archives, libraries, books and press, visual arts (including plastic arts, photography and design), performing arts (including music, dance, drama, combined arts and other live show), audiovisual and multimedia (including film, radio, television, video, sound recordings, multimedia works and videogames), architecture, advertising and arts crafts.

However, some distinctions have been brought into the grouping to: 1) analyse 'domains' listed under the Creative Europe programme which do not readily fall into the official statistics approach adopted by ESSnet-Culture, notably festivals; 2) take into account the EC's request to include only part of the audiovisual and multimedia domain (namely sound recording and videogames) considering that EAO already extensively covers film, radio, television, video and multimedia works; as well as to 3) single out specific measurement issues (e.g. design is distinguished from visual arts).

The domains covered in this study thus include the following:

- Cultural heritage;
- Museums;
- Archives and libraries;
- Books and press;
- Visual arts;
- Design;
- Performing arts;
- Sound recording;
- Video games;
- Architecture;
- Advertising (not mentioned in Creative Europe, but mentioned in ESSnet);

[49] ESSnet-Culture proposed an updated European statistical framework organised in ten cultural domains (see main text above) and six cultural functions, namely: creation, production/publishing, dissemination/trade, preservation, education and management/regulation. The measurement unit of the framework is a cultural activity, which is identified at the crossing between a given domain and a given function. A domain is understood as an economic sector or a field of activity. The term 'domain' is based on definitions used in the NACE classification but for CCS is often understood as applying to a broader set of activities which may not be entirely 'economic'. The rationale behind this is that there are many CCS activities such as visual or performing arts which when examined holistically involve many forms of unpaid activity, and many people engage in these activities for purposes other than monetary gain. The functions used for the general ESSnet-Culture framework for cultural statistics are the main functions considered for mapping cultural activities and identifiable with existing economic and statistical classifications. Functions are connected with domains so as to define cultural activities (ESSnet-Culture, 2012, p. 44-45).

[50] The eligible CCS include: architecture, archives, libraries and museums, artistic crafts, audiovisual (including film, television, video games and multimedia), tangible and intangible cultural heritage, design, festivals, music, literature, performing arts, publishing, radio and visual arts (European Parliament & Council of the EU, 2013 – art. 2).

- Art crafts;
- Festivals (not mentioned in ESSnet-Culture – but mentioned in Creative Europe – as statistically classified under other domains, in particular 'performing arts').

This chapter is structured as follows: it first presents official statistics on CCS available from Eurostat and major data gaps, then it illustrates data available from alternative sources (as identified in Chapter 1) resulting from the mapping, finally it draws conclusions showing in which way alternative data could help fill in the identified data gaps, while taking into account their limits. Data from alternative sources are presented per each cultural and creative domain (infra-section 3). However, as some types of data do not lend themselves to a sectoral presentation but are better addressed by a cross-sectoral approach, data on cultural capital, cultural participation, cultural diversity, international trade in services and finance are covered in a separate section (4).

2. Official statistics: state-of-the-art

2.1. Data available

A rich amount of data on CCS can be extracted from Eurostat:

- Economic activity data from the EU Structural Business Statistics (SBS), which describe the structure, conduct and performance of businesses in the EU by providing data such as number of companies, turnover, Gross Value Added (GVA), etc.

- Innovation data from the Community Innovation Survey (CIS) which collects data on innovative companies by sector and by type of innovation (new product, process, or marketing device) and on conditions surrounding the development of an innovation, such as the objectives, the sources of information, the public funding or expenditure in innovation.

- Employment data, from the EU Labour Force Survey (EU-LFS), which provide data on employment and unemployment (such as number of people employed and unemployed, people employed per type of occupation, sex, level of education and part time/full time, etc.). Information on 'employment' is in the form of data related to 'occupation' (meaning the job a person does) and 'economic sector' (meaning the sector a person works for).

- International trade data in cultural goods from Comext database which contains detailed external trade data of physical goods as reported by the 28 EU member states, providing data such as monetary value of books, films or video games exported between EU28 countries and with third countries. Data are expressed in euro or in other units like weight when relevant.

- Cultural participation data from various surveys including:

    - the Adult Education Survey (AES) covering adults' participation in education and training (formal, non-formal and informal learning) – e.g. both AES 2007 and AES 2011 included questions on cultural participation (e.g. attendance to cultural sites and to live performances) but these were included in an optional module and the geographical coverage was slightly different for the two waves[51];

[51] See: http://ec.europa.eu/eurostat/web/microdata/adult-education-survey

- the Social Income and Living Conditions survey (SILC) – in 2006, the survey included an *ad-hoc* module on 'Social and cultural participation'. A new edition of the module on 'Social and cultural participation' is planned for 2015. Results will be available in the second half of 2016;

- Time Use Survey (TUS) measuring the amount of time people spend doing various activities, such as paid work, household and family care, personal care, voluntary work, social life, travel, and leisure activities. The results of the 2010 wave will be available in 2016;

- ICT Use Survey which provides statistics on individuals and households on the use of Information and Communication Technologies at European level. This contains information on the use of Internet to buy or order films and music, video games, books (including e-books), magazines and newspapers as well as the use of peer-to-peer file sharing for exchanging movies, music Internet activities carried out to upload text, games, images, films or music to websites (e.g. to websites for social networking);

- Household Budget Surveys (HBS), national surveys mainly focusing on consumption expenditure (including on some cultural activities). They are conducted in all EU Member States to monitor household expenditure.

2.2. Major needs and gaps

Although various data on CCS can be retrieved from Eurostat's sources, data are not available to the same extent for all CCS and all countries.

As regards **economic activity**, the SBS provide data for most CCS based on NACE codes[52], namely: Books and Press[53], Audiovisual and Multimedia (including music and video games)[54], Architecture[55], and Advertising[56]. Data for Visual Arts (that also include Design, according to definitions used) are theoretically available but as businesses in this sector tend to be small, it is likely that they do not appear in business survey samples, and economic indicators may not be released because of privacy issues.

For the time being, economic activity data are not available for Cultural Heritage[57], Archives and Libraries[58] and Performing Arts[59] as NACE divisions 90 and 91 are not covered by the SBS[60]. However, the SBS regulation is currently being reviewed: these sectors will be included in the short term.

Employment is a particularly challenging statistical area. One of the main problems stems from the fact that many ISCO and NACE codes[61] are not structured to allow cultural activities to be distinguished. A list of all

[52] NACE is the European industry standard classification system consisting of a 6 digit code.
[53] NACE codes 58.11 Book publishing, 58.13 Publishing of newspapers, 58.14 Publishing of journals and periodicals, 63.91 New agency activities, 47.61 Retail sale of books, 47.62 Retail sale of newspapers, and 74.30 Translation and interpretation.
[54] NACE codes 59.11 Motion picture, video and television programme production activities, 5912 Motion picture, video and television programme postproduction activities, 59.13 Motion picture, video and television programme distribution activities, 59.14 Motion picture projection activities, 59.20 Sound recording and music publishing activities, 60.10 Radio broadcasting, 60.20 Television programming and broadcasting activities, 47.63 (partially cultural) Retail sale of music and video recordings in specialised stores, 77.22 (partially cultural) Renting of video tapes and disks.
[55] NACE code 71.11 Architectural activities.
[56] NACE code 73.11 Advertising agencies (partially cultural).
[57] NACE codes 91.01 Libraries and archives, 91.02 Museums, and 91.03 Operation of historical sites and buildings and similar visitor attractions.
[58] NACE code 91.01 Library and archives activities.
[59] NACE codes 90.01 Performing Arts, 90.02 Support activities to performing arts, 90.04 Operation of arts facilities.
[60] Despite this, some major institutions from these sectors are included in publicly accessible business registers because they have operations organised as public companies.

NACE and ISCO codes, either fully or partially cultural, has been proposed by the ESSnet-Culture group. In their report (2012), it is suggested that data at 4 digit level for both ISCO and NACE codes would be required from all EU 28 countries to carefully 'extract' the 'cultural' part of each code and correctly estimate cultural employment per sector (even if some codes represent partially cultural occupations or economic activities, even at the most refined level of the classifications e.g. 4, 5 or 6 digits[62]).

In the EU-LFS framework, the minimal level of detail required for the NACE and ISCO codes is currently 2 and 3 digits respectively. This is not sufficient to properly study CCS employment, although some countries already provide a higher level of detail on a voluntary basis (i.e. 3 digits for NACE; 4 digits for ISCO). In the absence of an agreed methodology to estimate the cultural 'parts' of ISCO and NACE codes, until 2011 Eurostat has been able provide CCS' official employment statistics only for a subset of cultural occupations and economic activities[63].

As part of its four-year project, Eurostat has applied the estimation methodology designed by Task Force 3 of the ESSnet-Culture project. This was used to compute the cultural coefficients to be allocated to partially cultural NACE and ISCO codes, and thus obtain more accurate data on occupations per sector. This methodology has been validated and adopted by the Culture Statistics Working Group composed of representatives of NSIs. Next step will be to refine the estimations based on more detailed information provided by countries.

In addition to data limitations that affect specific sectors (i.e. heritage sectors and performing arts) and statistical areas (employment), other gaps can be identified that affect the availability and/or coverage of data across various cultural and creative sectors and areas (business, employment, trade, cultural participation and finance). These relate to:

- Limits in international statistical classifications;
- Limitations regarding specific statistical units or indicators;
- Non-coverage of CCS-specific 'dimensions' by EU official statistics.

Limits in international statistical classifications[64]

In many cases, the sub-categories of the statistical classifications do not readily match the perceived distinction between different CCS activities.

In particular, music, design/fashion, crafts and video games are poorly measured by NACE codes:

[61] The core of the official statistics system is its classification systems. Economic statistics are fundamentally shaped by the sectoral classification (NACE) which concerns economic activity at industry level, and the occupational classification (ISCO) which classifies the jobs people do. Thus for example one might work in the manufacturing industry, but one's occupation might be an accountant.
[62] While EU NACE version contains 4-digits, national versions can be detailed up to 5- or even 6-digits.
[63] In the last Cultural Pocketbook (2011), for instance, a pragmatic approach was adopted to publish employment statistics given the observed limits: in the absence of a matrix to calculate employment per sector, statistics on sectors and occupations were presented separately, and only in relation to 'fully' cultural NACE and ISCO codes (e.g., employment data are provided only for 'fully cultural' ISCO codes 243 — Archivists, librarians, and related information professions; and ISCO 245 - Writers and creative or performing artists (authors, journalists, sculptors, painters, composers, musicians, singers, choreographers, dancers, actors, directors and other related artists).
[64] The revision process would involve Eurostat but also international actors such as the United Nations. The UN Expert Group on international statistical classifications met in May 2015 where the need to revise the NACE classification was discussed (see: http://unstats.un.org/unsd/class/intercop/expertgroup/default.asp). The extent to which such revisions will reflect the need to better measure CCS will depend on specific requests from, for instance, national governments. For instance, Director General of the UK Office for National Statistics (ONS), has written to the Director of the UN Statistical Division, outlining the UK Government's concerns that the Creative Industries are not well represented in the current classifications (DCMS 2015, p. 36).

- Music: while a good part of the music industry is implicitly included in the codes making up the CCS' estimates (59.2 Sound recording and music publishing activities), some music activities are actually aggregated under other codes. Companies whose main business is 'live music', for instance, are classified alongside theatre in 'Performing arts' category (90.01 Performing arts) rather than under the category 'Sound recording and music publishing' which identifies companies whose main business is sounds recording. Video production related to music cannot be separately identified. Music's estimates cannot thus be satisfactorily isolated from official statistics[65].

  There is also a 'misclassification' risk due to the rapid evolutions that characterise this sector: some companies such as Spotify are indeed not counted as they are categorised under more ICT-related codes (73.12 Media representation) rather than the 'agreed' 59.2 code. Addressing this problem may require abandoning the 'sound recording' designation and revising the sector description to better take into account its ICT and live performance 'components' (e.g. live music and media companies could so be reclassified under a 'sound recording' category). However, this is not an easy task and may not necessarily lead to more satisfactorily solutions.

- Video games: 'misclassification' issues also apply to the rapidly evolving video games sector. In their report (2013) looking at the question of how to define and measure the creative industries, Oliver and Ohibaum cite that in France 'official' video games companies such as Arkham Development classified as NAF[66] 62.02 'Computer software and consultancy activities' and DotEmu classified under NAF 62.09 'Other information technology and computer services activities' risk being missed out from official statistics on CCS, as neither of the two codes is included in the ESSnet's definition used in France to classify and measure the sector.

- Design: design presents very particular measurement problems. It is not an 'industry' in that there are comparatively few design companies. Design is usually an occupation but even as such is not easily identified either from a statistical or from a professional viewpoint (see below on problems with ISCO codes).

  Fashion can serve as an example of the problems of measuring/classifying design activities. Ideally, fashion design would be separately identified in statistical estimates. However, it is not possible to separate design associated with fashion from the category 74.10 (Specialised design activities) with any degree of confidence. Nor is it possible to identify in official data the full range of fashion occupations across industries because there is no readily available set of job descriptions which can be said to be either limited to, or associated with 'Fashion' (e.g. UK Fashion study includes Hair dressing and Cosmetics).

While sectoral codes are the baseline for most descriptions of CCS' activities it is actually the job people do, their 'occupation', which is described as cultural or creative. Thus ISCO occupational codes tend to capture CCS activities more accurately than sectoral codes. This approach also leads to talk of 'embedded' CCS' activities conceived statistically as CCS occupations/jobs taking place in firms in non-CCS sectors.

65 Similarly the European Commission research centre JRC (2012a) reports 'This Eurostat category [ISIC 5920] is narrower than definitions of the music industry which are commonly used in industry publications (e.g. IFPI), policy documents (e.g. Department of Culture, Media and Sport, 2001) and academic literature (e.g. Hesmondhalgh, 2007; Engström and Hallencreutz, 2003; Wikström, 2010). According to Hesmondhalgh (2007), the music industry is constituted of three parts: recording, publishing and live performance. Of these three live performances are not included in the Eurostat category 'sound recording and music publishing'. Others also include a number of related activities such as music photography in their description of the music industry. The UK government department on culture, media and sports (DCMS, 1998) for instance distinguishes between core, supporting and related activities.'

66 NAF is the French equivalent for NACE.

However, again some statistical codes do not allow for the identification of purely cultural and creative occupations (even at the most detailed level of digits, see above), with major consequences for designers and craftsmen:

- Design: more than a sector of activity, design is usually a job that is undertaken within a company that manufactures physical products, or that provides a broad range of business services. However, whilst increasingly requested by companies in various sectors, design is difficult to characterise as an 'occupation', or a job, because it is often undertaken by a wide range of people who would not necessarily think of themselves as 'designers'. For example engineers, making equipment or creating new buildings might be thought of as 'designers'. Today, it is therefore not really possible to know with precision how many designers work in Europe, as the codes (and actually the professional sector either) do not have a clear definition of the designers' 'job'. Designers are probably classified under the "closest" codes available, such as 3432 Interior designers and decorators, 2651 Visual artists, and 2659 Creative and performing artists not elsewhere classified.

- Crafts: the statistical issues involved in the identification of crafts both as an occupation and as a productive activity are well known: statistical codes do not easily distinguish between 'handmade' craft or artisan work, and "mass" production, nor between the use of 'natural' raw materials and synthetic colours or fabrics. Some codes exemplify these problems: code 7321 (Abrasive wheel formers, potters and related workers) can include makers of ceramic insulators, and bricks not to mention mass produced moulded tableware; codes 7331 (Handicraft workers in wood and related materials) and 7332 (Handicraft workers in textile, leather and related materials), despite the designation 'handicraft' can involve mechanised or large scale production; 7322 (Glass makers, cutters, grinders and finishers) can similarly cover the production of window glass and other industrial products.

Some issues are also encountered for certain occupations in music and video games. In the case of music, musicians themselves are well covered by ISCO 2652 (Musicians singers and composers), but occupations for other supporting jobs (e.g. A&R) are not well-defined. For video games many of the occupations are inseparable from general IT functions, and there is not code for professional gamers (e-sports).

Problems related to NACE and ISCO classifications clearly affect the coverage of the official statistics using these classifications, notably business and employment statistics.

Standards are also problematic in relation to finance, but this topic was only very partially addressed by this study as alternative data are not expected to be of great help in this case[67]. It suffices to say that public finance (defined as expenditure of institutional sectors in culture) is an area where the production of systematic and accurate statistics presents big limitations. Following ESSnet-Culture, Eurostat has identified COFOG[68] codes 08.2 (Cultural services) and 08.3 (Broadcasting and publishing services) as wholly cultural expenditures codes, whilst codes 08.5 (R&D Recreation, culture and religion) and 08.6 (Recreation, culture and religion) are partially related to cultural activities as they also include expenditure on religious activities. These codes cannot be split into activities associated with particular sectors to allow for example identification of public funding for the arts. As for private expenditure (defined as data on private financing, donations, or sponsorship of CCS activities) cannot be identified systematically from either official or alternative data

[67] In the 1990s the EU LEG group was unable to assess finance of culture, and ESSnet-Culture's report (2012) has voiced similar concerns. A similar initiative on international finance of culture by the Guggenheim Foundation in the 2000s was also unsuccessful.
[68] The Classification of the Functions of Government (COFOG) is a classification defined by the United Nations Statistics Division. These functions are designed to be general enough to apply to the government of different countries.

sources. Data on individual and household expenditure (collected under code COICOP[69] 9 Recreation and culture by the HBS) are not satisfactory due to issues in the classification system, which only distinguishes a limited range of cultural spending. However, Eurostat is currently compiling a new set of data at 5-digit level of COICOP (based on available microdata[70]) which should help measure cultural expenditure in a more exhaustive way. These are expected to be available in the next few months.

Limitations regarding specific statistical units or indicators

Limitations have been identified in relation to specific statistical units or policy-relevant indicators:

- Micro-companies often escape from official statistics, one reason being that the SBS use business registers as a source of data on companies: as most micro-companies do not reach the VAT threshold, they do not appear in business registers or in SBS. Also, very small companies can be 'informal' and their income undeclared to tax regimes. This is a serious issue considering that small and micro-companies are estimated to represent a considerable majority in the sector.

  Measurement problems with micro-companies have been exacerbated by the Internet as it has lowered the barriers to the market and made it easier to start small 'creative' activities/business (by producing and selling music, video games, design products, self-published books, etc.). This problem is well explained by Oliver and Ohibaum (2013) in relation to video games: the advent of games on tablets and phones has led to the rise of a large number of Unorganised Content Producers who work in micro businesses that are unlikely to be recorded in conventional statistics.

  If official statistics do not correctly take into account the high amount of micro-companies but also creators and freelancers that are emerging on the Internet, employment and number of companies but, more importantly, GVA statistics for the sector risks being underestimated.

- GVA: it is notoriously difficult to measure the value of the output of non-industrial sectors such as museums, galleries and libraries. Performing arts, too, present particular problems as much of its productive capacity relies on volunteers (not available from EU-LFS as outside of its scope) and temporary workers, and because value of a major arts performance is something more related to quality than quantity. As a result, CCS' total GVA probably remains undervalued.

- International trade in cultural services: whilst trade of physical objects is relatively well covered by official statistics (data are readily available in Comext database apart for some goods such as e-books and sound recordings), and classifications of such statistics are fairly well placed to identify cultural products, the major problem in trade data is that they do not cover services satisfactorily [71]. This is an important gap, considering that much CCS' activity is exchange in services or in electronic products (e.g. architectural services, streaming of performances, travelling arts companies, international contracts for advertising). Unfortunately, for the time being there is no systematic mechanism for compiling exports and imports of services due to the difficulty of tracking flows of

[69] The classification of individual consumption by purpose (COICOP) is a classification used to classify both individual consumption expenditure and actual individual consumption.

[70] "*Microdata are the units of data that aggregate statistics are compiled from. Microdata consist of sets of records containing information on individual respondents or business entities. To protect the anonymity of respondents (persons, organisations), the access to microdata is restricted*" (Source: Eurostat). For more information: http://ec.europa.eu/eurostat/web/microdata.

[71] For service trade, the major data source is the Balance of Payment which differs from Comext in terms of conceptual framework and classifications used. Countries are at present implementing a new classification system for trade statistics: EBOPS 2010 (Extended Balance of Payments Services) (WTO, 2010). It is expected that data will be somewhat irregular while this takes place. When EBOPS 2010 is fully implemented it is to be noted that its coding system makes CCS activities more 'visible' but in less detail, meaning that EBOPS will have some broad groupings related to CCS but no specific sectors like those analysed here.

services in terms of both 'immaterial' products and peoples' activities. UN is currently working on this issue, as well as Eurostat as part of its four-year project on cultural statistics described in Chapter 1.

- Cultural participation: statistics on participation suffer from infrequent data collection and lack of standardisation. For instance, while EU-SILC and AES substantially ask the same question, they use slightly different wording, therefore results are difficult to compare[72]. Also, the distinctions used are generally 'muddied' by e.g. overlaps between commonly accepted distinctions: for instance, any artist may in different contexts be seen as audience, performer, 'volunteer', 'amateur', 'part time' employed, or 'professional'[73]. It does seem appropriate to consider whether some standardisation would help in this area by eliminating the possibility of two or more surveys asking the same questions (but in different ways), while also allowing more comparability between different EU-wide surveys.

Non-coverage of CCS-specific 'dimensions' by EU official statistics

In addition to more 'traditional' statistical axes of economic activity, employment and cultural participation, cultural capital and cultural diversity were also explored, as requested by the European Commission.

However, these areas do not really fall in the scope of Eurostat statistics:

- Cultural capital: the concept of 'cultural capital' (Throsby, 2010) is not easily framed by statistics. The term is used to draw attention to the overall value of culture, including both tangible forms of value (buildings, artworks etc.) and intangible forms of value (intellectual capital, ideas, concepts, beliefs etc.). The estimation of the capital value of culture usually requires *ad hoc* methodologies such as contingency value analysis, further discussed below (infra-section 4.1).

- Cultural diversity: although there is no officially agreed definition of cultural diversity, the term is often understood as related to three dimensions (Stirling, 1999): 1) variety: how many different kinds of music/ film are produced, distributed and consumed?, 2) balance: how much time/number of performances are devoted to each kind/genre, 3) disparity: what is the degree of difference between, e.g. different genres? Although international trade data can provide useful information on sales and market share of cultural goods, it is clear that *ad hoc* research, data collection and analysis is required to obtain comprehensive information covering the three dimensions of diversity.

3. Mapping of alternative data per sector

Cultural Heritage

Council conclusions of 21 May 2014 on cultural heritage as a strategic resource for a sustainable Europe define cultural heritage as "*the resources inherited from the past in all forms and aspects – tangible, intangible and digital (born digital and digitised), including monuments, sites, landscapes, skills, practices, knowledge and expressions of human creativity, as well as collections conserved and managed by public and private bodies*

[72] See also Schmeets and Huynen (2010). They compared the variation in responses to the cultural participation questions in SILC across all countries participating in the EU-SILC ad hoc module on social and cultural participation in 2006. Their conclusion was that variations in the way the questions were posed in different countries were at least in part the cause for these variations.

[73] In relation to these definitional issues, UNESCO (2009; UIS, 2012) formulation of active v. passive and creative v. receptive participation could be of help. These distinctions are not 'mere semantics'. Good statistics in this area link to trends such as the rise of 'portfolio' working (whereby an artist is sometimes paid and sometimes not), the policy need to establish more stable working conditions for artists, and the need to create the context for successful 'amateurs', especially youth, to 'turn professional'.

such as museums, libraries and archives. It originates from the interaction between people and places through time and it is constantly evolving"[74].

This broad definition, which is the result of a constant progress towards the acknowledgement of the holistic value of cultural heritage, from the beginning of the XIX century until today, generates several difficulties from the point of view of culture statistics, due to heterogeneity of cultural heritage, in type (from small archeological findings to landscapes), ownership (public, private), 'form' (tangible, intangible), etc.

Tangible heritage

Tangible heritage is normally understood as physical artefacts (i.e. buildings monuments, sites, landscapes, objects and artworks) which are considered worthy of preservation for the future due to their artistic, cultural and historical value. In all European countries tangible heritage is first of all identified and catalogued in national inventories, in order to select the artefacts to which preservation regulations apply. Heritage is usually ranked by its national, regional or local relevance by type or cultural value[75].

At European level, the European Heritage Label sites symbolise and celebrate European integration, ideals, values and history. These are carefully selected for their symbolic value, the role they have played in European history and the activities they offer in order to bring the European Union and its citizens closer together.

At international level the most important listing of heritage sites, selected and protected for their 'Outstanding Universal Value' is managed by UNESCO: The World Heritage List.

The most commonly available statistic for heritage sites (monuments, archeological sites and museums, which will be examined more extensively in the next section) is the annual number of visitors. Normally a count of visitors is kept through number of ticket sales, or directly by the custodian. However, this information is not always available as some sites may have 'open' or 'uncontrolled' entry. Similarly, the number of visitors is difficult to calculate for historical centres and landscape. Occasional visitor surveys take place at some sites either to replace administrative counts at 'open' sites, or to add qualitative information to visitor counts. Whilst population surveys are mainly used to find out which part of the general population visits museums and to discern the demographic characteristics of the visitors, such as gender, age, education level or income, visitor surveys are generally conducted on (a sample of) visitors of an exhibition of particular museums to collect both demographic data and qualitative information aiming at improving heritage sites' policies (i.e. as regards visitor's satisfaction, accessibility, efficacy of communication, visitors loyalty, etc.)[76].

Visitor spending as well as site maintenance costs are the other basic measurements associated with tangible heritage. These can be retrieved from administrative accounts of all countries in the EU, at national and subnational level, as they form the basic accounting for site management. However, it is easily demonstrable that such measurements do not capture the full 'value' of a historical site and that alternative measurements are needed (see infra-section 4.1 on Cultural Capital). Also, in-depth impact assessments rather than simply 'raw' data are necessary to say more about the sector and its value and effects on the economy and society. The Creative Europe project 'Cultural Heritage Counts for Europe' has mapped impact assessment studies in

[74] Similarly the Council of Europe Framework Convention on the Value of Cultural Heritage for Society of 27 October 2005 (or 'Faro Convention") which defines cultural heritage as "*a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time*'.

[75] European countries which designate sites of local importance include Denmark, France, Germany, Ireland, Portugal, Spain, UK, as well as in Switzerland.

[76] Source: EGMUS website (http://www.egmus.eu/en/audience_research/).

this area and provided recommendations to improve the production of evidence as regards cultural heritage impacts.

Box 2 – "Cultural Heritage Counts for Europe" (CHCfE)

'Cultural Heritage Counts for Europe' (CHCfE)[77] was a two-year Creative Europe supported project (2013-2015), led by a consortium of seven partners including Europa Nostra, the European network advocating for cultural heritage in Europe (as Lead Partner), ENCATC (the European Network on Cultural Management and Cultural Policy Education), Heritage Europe (the European Association of Historic Towns and Regions), the International Cultural Centre (Krakow, Poland), the Raymond Lemaire International Centre for Conservation at the University of Leuven (Leuven, Belgium) as well as The Heritage Alliance (England, UK) (as associate partner).

The project aimed to raise awareness on the value of cultural heritage for the development of contemporary Europe by gathering evidence of impacts and developing policy recommendations.

The final report finds that the number of cultural heritage impact studies carried out in EU countries has grown considerably in the last decades. While economic studies still predominate, the number of those devoted to social and cultural impacts shows an increase from the 1990s onwards. Environmental impact studies are however few, this being a new area of research.

Although only 6 per cent of the identified studies were conceived as a holistic impact assessment covering the economic, social, cultural and environmental domains, the combined analysis of the mapped studies provide a comprehensive overview of the wide-ranging benefits of investing in Europe's cultural heritage. These include impacts on the attractiveness and identity of Europe's regions, cities, towns and rural areas, the contribution to job creation, good return on investment due to the heritage's 'capacity' to generate tax revenue for public authorities, as well as improvement of social capital, quality of life and sustainable-led regeneration.

Still, evidence of impacts could be improved. The project indeed finds that the calculation of the GVA remains problematic for this sector (as also highlighted in this study) and that the number of heritage impact studies in the field of education, creativity and sustainable development, as well as job creation in related sectors remains limited. Moreover, there is an urgent need for harmonised methodologies and data collection processes enabling the assessment of impacts in a holistic way: the surveyed organisations, including public government or agencies, cultural organisations and research institutions, called for greater support to build capacities and improve the production of evidence (through the development of adequate skills, harmonised methodologies, etc.).

The report invites EU institutions to "adhere to and promote a holistic approach to collecting, managing and interpreting data, both quantitative and qualitative, which can demonstrate the holistic impact of heritage" and make use of the framework provided by the CHCfE's report to identify, define and categorise heritage impact indicators. It also suggests that the EU institutions should support training schemes for practitioners who are responsible for conducting heritage impact assessments and providing cultural (heritage) statistics, and recommends that the evidence collected through this project is made widely and freely accessible to all interested parties.

[77] http://www.encatc.org/culturalheritagecountsforeurope/outcomes/

Intangible heritage

Intangible heritage can broadly be understood as referring to cultural practices or 'behaviour' such as dance, musical performance, theatrical representation, festivals, feasts and other traditions. UNESCO has agreed an open-ended definition[78] leaving it to countries to decide what does and does not constitute their 'intangible heritage'.

As in the case of tangible heritage countries signing the UNESCO Convention have been asked to prepare a list, or 'inventory', of important intangible heritage. Many EU countries have compiled their official inventories of intangible heritage, but it is not yet possible to refer to systematic statistics at the national or regional level.[79]

Museums

The EGMUS project (see Chapter 1 – infra-section 2.3) provides data on museums from 29 countries based on international standards and a Standard Questionnaire that was developed to collect comparable data at national level. The data span the years since 1998 but some countries only have two or three years included (Belgium 1, France 3, Ireland 2, Macedonia 2, UK 2). The variables are very extensive including: type of collection (art/historical, science/ethnology, other), ownership and management (state, local/regional, private), admissions/visits (total, free, foreign, temporary exhibits, museum card), staff (paid, volunteer, full time equivalent), expenditure, income (total, entry fees, subsidies), use of ICT (admin, public info, inventory, Internet, web site, portal), education programmes (total, schools, minorities, seniors, others), days open, ticket price, and various derived indicators.

Considering that EU SBS do not cover museums and that data on volunteers are not available from EU-LFS, it is particularly interesting to look at this source as a possible way to fill in the data gaps observed in official statistics.

For instance, EGMUS provides data on volunteers showing that they represent a significant proportion of museum staffing. This is illustrated in Figure 1 presenting volunteers as a percentage of the total staff based on data on museums from different countries. By giving their labour for free, volunteers may be said to be making a donation (the money which would otherwise have to be spent on staff to do the same work)

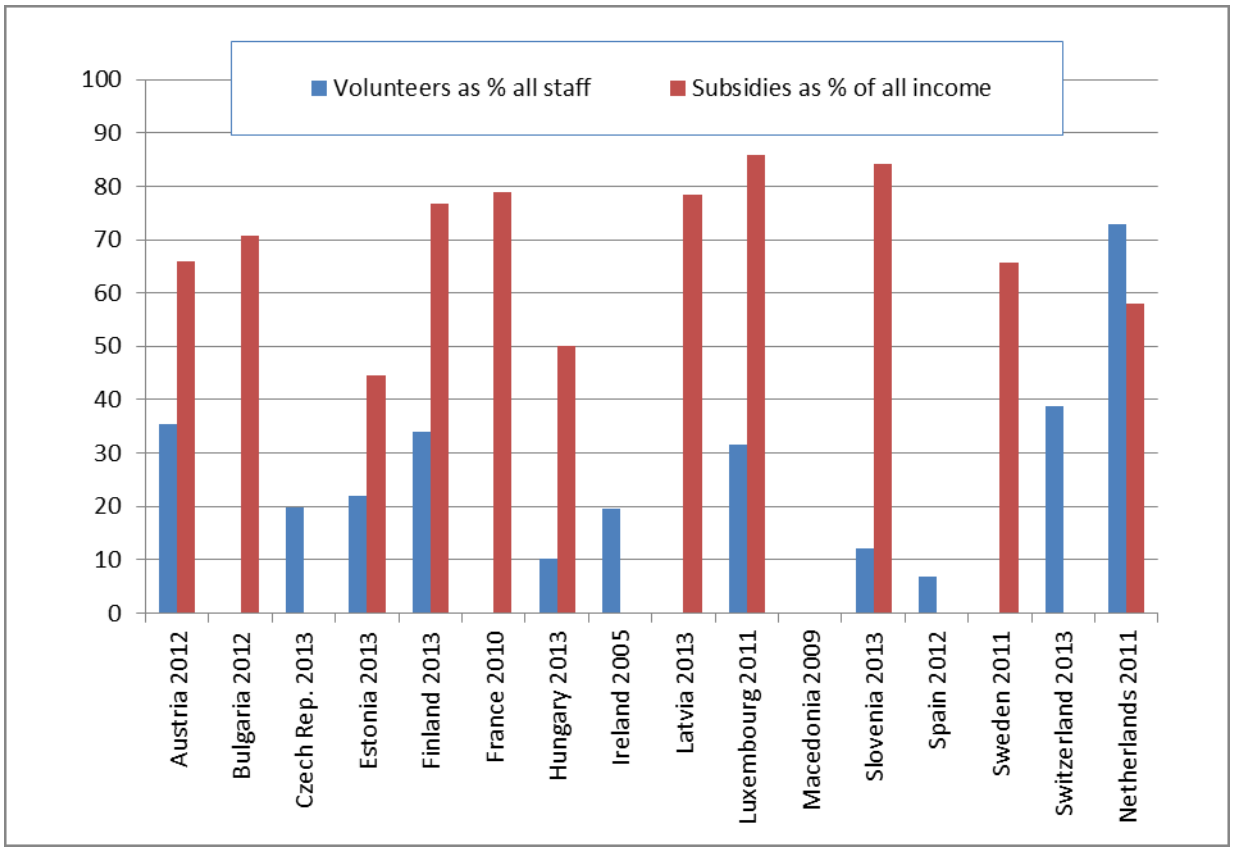
Secondly, Towse (2014) suggests 'subsidies as a percentage of overall income' as a representative financial indicator for museums. This indicator – which can also be obtained from EGMUS as illustrated in Figure 1 – reflects the degree of public finance for museums. In some EU countries museums support themselves more through commercial ventures than in others, thus reducing the need for public subsidy.

However, the availability and comparability of EGMUS data may be questioned. Data are indeed not available for the same years for all countries and, when available, they are often not comparable due to the different scope of sources used to compile museum statistics. For instance, some national statistics only cover museums which are financed by the state, or professionally-run, while other statistics omit certain aspects of the museums such as staff, income or expenditure.

[78] '*the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognise as part of their cultural heritage*' (UIS 2009; p. 46).

[79] The following European countries have submitted a Periodic Report to UNESCO on their implementation of the Convention; Albania (2014), Belgium (2013), Bulgaria (2013), Croatia (2012), Cyprus (2014), Estonia (2014), France (2014), Hungary (2013), Italy (2014), Latvia (2012, 2014), Lithuania (2012), Luxembourg (2014), Romania (2014), Slovakia (2014), Spain (2014), and Turkey (2013). Source: http://www.unesco.org/culture/ich/index.php?lg=en&pg=00460#reporting-on-the-implementation-of-the-convention-and-on-the-status-of-elements-inscribed-on-the-representative-list – accessed on 16 March 2015.

Figure 1 – Examples of Indicators for European Museums from selected countries, showing their degree of dependency on donations of time (volunteers) and money (financial subsidies) – different years



Source: EGMUS accessed 11 April 2015

Additional financial data can also be found in the BACH (Banque de France) which presents a very detailed financial analysis (accounts) for fourteen countries[80] with a view to produce comparable information on the financial statements of companies and economic-financial ratios aggregated by sector and by size class[81]. BACH data shows that staff costs for museums and libraries represent close to 50 per cent of turnover in a number of countries. It also presents GVA for museums and libraries, which represents a significant gap in European official statistics. The table in Appendix 4 shows more extensively data available on museums (and libraries) from BACH.

In sum, alternative data from EGMUS and BACH demonstrate the degree to which European museums in different countries depend on donations of staffing in the form of volunteers, and money in terms of public subsidies, within quality and comparability limits (for EGMUS).

[80] Austria, Belgium, Czech Republic, France, Denmark, Germany, Italy, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Spain.

[81] BACH data are prepared by National Bank from company accounts. They are therefore dependant on national methodologies, but particular attention is given to harmonisation of financial information. Source: BACH User Guide (https://www.banque-france.fr/fileadmin/user_upload/banque_de_france/Economie_et_Statistiques/BACH-Summary-Userguide.pdf).

Archives and libraries

EBLIDA is the European Bureau of Library, Information and Documentation Associations[82], an official grouping of European library associations. EBLIDA has established a Knowledge Information Centre and conducted an EU-wide survey of library administrative data in 2011. Responses were received from 25 countries for both Academic and Public libraries.[83] The following list gives some key variables and numbers of responses for Public libraries:

Number of libraries	25 countries
Number of registered users	21 countries
Media stock[84]	22 countries
Number of loans	21 countries
Number of visits	18 countries
Number of staff	24 countries
Average number of e-resources[85]	10 countries
E-visits (No. of hits to the website)	15 countries

EBLIDA demonstrates the sustained determination of European librarians and their associations to continue providing comparative statistics. Libraries are 'natural' collectors and holders of statistics. Though definitional problems still surround monitoring of the electronic services in libraries, as demonstrated by lower responses to the 'e-related' questions, their inclusion as core variables demonstrates librarians' commitment to tackle this issue.

The pattern for the development of administrative statistics for both museums and libraries is very similar. Both sectors have demonstrated commitment to address the issue.

Books and press

Books

Book publisher statistics include a number of traditional indicators: the number of titles in print, the number of new titles in the last year, number of sales and value of sales. Such figures may be available from publishers' associations, retailers, ISBN, or commercial agencies. None of these necessarily provides 100 per cent coverage of the market, but the figures are accurate and collected annually (at least) by the interested agencies. Some countries (e.g. France, Italy) incorporate such figures in national statistics.

Data from the industry may be particularly useful to track evolutions in the sector and the development of new services and revenue streams. For instance, aggregated data at EU level on the sales of e-books are available from FEP (Federation of European Publishers) (i.e. e-book market as a percentage of the total book market). Amazon could be a previous source of information at least to track digital sales of books and e-books from different publishers and their geographical distribution.

However, data published from alternative sources usually do not correspond to the figures published by statistical offices. FEP, for instance, estimates 130,000 people were occupied full time in book publishing in

[82] www.eblida.org
[83] Austria, Bosnia and Herzegovina, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, Montenegro, Netherlands, Norway, Poland, Portugal, Serbia, Slovakia, Spain, Sweden and United Kingdom. Details of the survey and the Knowledge Information Centre from http://www.eblida.org/activities/kic/, access 23 February 2015.
[84] Media stock is the total number of all items including books, audio, visual, and other (e.g. Slovakia, UK), or e-titles (e.g. Sweden).
[85] E-resources is the total number of all electronic resources; audio, visual, other electronic.

2013 (FEP, 2013), and contrasts this figure with Eurostat's estimate of 300,000 in 'book and journal publishing'. A full explanation of this difference would require detailed analysis but is broadly to be attributed to FEP using a narrower definition than the official sectoral and occupational classification (which also includes journal publishing).

Collecting Societies (CS) provide other interesting data, though tending more to reflect the data of individual authors as much as their publishers.

The number of authors who are registered with the relevant CS, otherwise called 'members' of the societies is a statistic that relates to the number of authors working in a country, a figure that can be more or less precisely compiled from national Labour Force Surveys. But again, there are many difficulties in comparing the two estimates. Authors registered with CS may indeed not correspond to the real number of authors active in the market if, for instance, they have created one or two works of art many years ago but are still drawing a small revenue stream for reproduction/performance i.e. they are not 'active' anymore. In some cases the rights are inherited and so the registered author is dead, while a family member who is not an artist/author receives the revenue from reproduction/performance. Also, duplications may occur as a single artist/author may be registered twice or more in different societies, if he works in more than one genre, and/or if he is registered with more than one society which work in different EU states. These limits suggest that CS' data are not necessarily ready for immediate use and that further work is required to assess and improve their reliability.

The annual report of VG Wort, Europe's largest collecting society by membership exemplifies some of these problems. The society is mostly concerned with written 'authors'. Meanwhile, of the some 180,000 individual authors represented, many may be drawing royalties on works published many years ago including legatees drawing royalties from deceased authors. VG Wort (2014) also points out that some authors used pseudonyms.

As CS exist for all categories of authors and artists, what has been said here applies to all the other sectors where rights are managed collectively (audiovisual, visual and performing arts, depending on the rights).

Newspapers

The international source of data on newspapers is the World Association of Newspaper and News Publishers (WAN-IFRA[86]). They publish annual details of circulation, advertising, and other elements of the sector. The data are derived from national agencies including consultancy firms which specialise in media data.

WAN-IFRA data also increasingly include the 'new' on-line as well as print media. Data are presented for nationally based titles, but, especially in the case of on-line editions, customers may turn to any newspaper around the globe. Recent research on newspaper publishing shows that the combined use of official statistics and alternative data sources, including from WAN-IFRA, may help better understand the sector's 'digital developments' and new competitiveness trends (JRC, 2012b).

Visual arts

Perhaps the major 'alternative' data for visual arts are those coming from the 'art market', in particular those collected by The European Fine Art Fair – TEFAF taking place every year in Maastricht. Since 2000, TEFAF compiles annual reports which examine the global art market (see for instance data from TEFAF on market sales of major auction houses Sotheby's and Christie's in Table 3), changing patterns of art collecting, the

[86] www.wan-ifra.org

economic impact of art fairs as well as, since more recently, online sales of art works. These reports, however, are not accessible free-of-charge.

Table 3 – Major auction market sales

	2008	2009	2010	2011	2012	2013	Average price (€)	
							2011	2013
World	19,000	13,100	22,100	23,100	20,900	22,500		32,723
Christie's		2,100	3,400	3,550	4,050	4,300		
Sotheby's		1,627	3,300	3,500	3,450	4,200		
Annual figures in millions of euros								
Countries (% of global sales)								
UK	34	22		19	20	17	50,100	68,332
France	6	11.5	6.3	5	5	6	11,600	14,158
Germany	2.4	2.8			2	2	6,650	8,628
Total EU	49	52		34		32	16,300	19,878
Switzerland	1.4	1			1	1	17,500	17,990
China	10	18	28	42	33	33	35,900	25,888
US	35	24		23	30	33	30,400	54,236

Source: Schmitt and Dubrulle (2014) after TEFAF (2014)

Art market data have become more significant in the last ten years as the market has extended its reach to a wide range of 'collectibles' that can no-longer be considered purely as 'high art' and globalisation has meant an increased international comparability of prices.

The market data can be used in a number of ways:

- It is generally accepted that one can compare the art market in different European countries and with other countries around the world;
- Trends can be established for the prices of work by particular artists;
- Prices can be established for particular genres of visual art. Some of these categories may not be considered art, whereas others may extend 'art' to new forms of collection;
- E-commerce data can help assess to which extent the Internet has improved accessibility to the art market for both buyers and sellers, or its global reach.

Collecting societies represent another important source of information to better apprehend the visual arts sector as they collect data on royalties due for the reproduction of work by 'visual artists' such painters and sculptors (see preceding section on Books for limitations of this data). Statistics on royalties for reproduction can be placed alongside sales data such as that from auction houses to present a broader picture of revenues for this sector. While auction houses will present their overall revenue in their company accounts, detailed auction data and collecting society data represent the earnings of particular artists or genres (i.e. painters, and sculptors).

Design

As explained at the beginning of this chapter, design presents very particular measurement problems as it is difficult to define, either as a sector or as an occupation. Direct discussions with the heads of the international professional design agencies ICOGRADA and IDA in the 2000s carried out in the scope of other assignments suggest that the only way to define a design professional is that they are registered in their national or international associations. This is for example the basis of the World Design Report (ICOGRADA/IDA, 2010).

Fashion represents a specific case of the problems affecting the measurement of design activities: "design activities" are classified under a unique NACE code from which fashion, graphic, interior or other types of design cannot be isolated.

To overcome statistical limitations, studies on fashion usually adopt one of two approaches. Firstly when they look at fashion as a sector they tend to approach it from a broad conception of the sector as a whole. This would then include a much broader range of textiles or including 'accessories', jewellery, and cosmetics.

An alternative approach is to draw a much narrower boundary by working from a set of well-known companies, or the participants in certain events such as the 'Fashion Week' which takes place in many leading EU cities.[87] This broad based approach is undertaken by selecting NACE relevant codes for textiles manufacture, jewellery etc. It has the benefit of easy calculation by taking the sector as a whole but has the disadvantage of including many mass-produced goods or industrial goods (for example it might include manufacture of work clothes and boots, or basic bed linen). By contrast the narrow approach of using known 'fashion' companies risks minimising the size and impact of the sector.

The distinction between the two approaches also raises the issue of deciding which 'textile companies' are engaged in fashion and which are not. This is not a mere technical distinction, as companies may feel aggrieved if they are told that they are not included as producers of 'fashion' goods[88].

Design can also be conceived of as an activity which is concerned with the physical layout or style of a material object, rather than as an occupation or a sector. Galindo-Rueda and Millot (OECD, 2015) summarise the results of an OECD project and its pilot implementation in the Danish Innovation Survey 2010 in which design is seen and measured as a process (see also BDC Barcelona Design Centre, 2014).

Performing arts

Countries often maintain 'professional' registers of performing artists. These may not include 'amateur' performers but can provide an important benchmark on the number of people who have at some time 'appeared' with professional companies. This is important considering that the EU-LFS cannot 'uncover' many arts-related 'jobs' as artists' 'main occupation' in terms of money earned and possibly hours worked may be in a non-CCS sector (see also infra-section 2.2 on methodological limits for occupations).

Administrative data can offer some help to obtain information on voluntary unpaid jobs as administrative registers from performing 'companies' or institutions are likely to include some information on volunteers (as already demonstrated for museums).

[87] Discussion of and examples of these two approaches may be found in Oxford Economics (undated), and Fashion United with national summaries of statistics from France, Germany, Netherlands, and UK www.fashionunited.com/global-fashion-industry-statistics-international-apparel (accessed on 17 June 2015). The 'broad' textile industry definition is also used in Italy (SMI, 2014).

[88] Similar arguments might be introduced regarding the place of design, and other cultural/creative occupations in other sectors e.g. designers, photographers, librarians working in automotive industry, engineering, furniture and construction in official statistics. In the face of this problem statistical programmes, such as ESSnet-Culture (2012) and UIS (2009), tend to exclude the manufacturing sectors from cultural and creative activities, though they usually include the 7410 'Specialised design activities' occupational code.

More data on temporary workers and volunteers could be of help in calculating 'added value' of performing arts, which is particularly challenging for official statistics, as discussed above (2.2).

These data however are only likely to be readily accessible for the larger companies and will be difficult to scale up to a national estimate.

Alternative data could also help gain a better understanding of the richness of the performing arts offer present in Europe (an aspect which is not captured by official statistics). For example, Operabase (Table 4) presents statistics on performances across the world by composer, opera, country and, importantly, also by city. Table 4 presents only the top ten best performing countries but information for 71 countries in total is available in Operabase.

Table 4 – World ranking of opera performances per capita of population 2009–2014

	Countries	Performances per capita	Performances
1	Austria	149.8	1,252
2	Estonia	97.8	131
3	Switzerland	95.9	747
4	Germany	92.5	7,565
5	Czech Republic	87.5	934
6	Hungary	61.8	614
7	Slovenia	60.5	124
8	Lithuania	53.3	173
9	Slovakia	49.2	267
10	Denmark	45.0	250

Source: Operabase (http://operabase.com/top.cgi?lang=en&break=0&show=rate&no=10) – accessed on 2 April 2015.

Audiovisual

As explained above, the audiovisual sector is specifically omitted from the scope of this project, except for sound recording and video games.

Sound recording

The digital revolution has provoked very important changes in the music sector, impacting musicians, performers as well as record and music publishing companies, shattering traditional business models. The numbers of sales, but not always the proportion of revenue, from CDs has fallen dramatically[89] and the licensing of rights has become an essential activity. Today, companies and artists mainly generate revenue from digital downloads, music subscription services and public performances.

Also, it is estimated that 80 *per cent* of new releases are by artists who are not associated with any record labels[90]. Oliver and Ohibaum (2013) highlight the role of Unorganised Content Providers (UCP) in Swedish music industry – with artists involved in self publications independently of any recording deal. It may be debated how much economic impact such 'low level' activities' may have for the single musicians, but such changes are certainly having a considerable effect on the music global value chain. They are indeed

[89] In 2013 digital represented 39 per cent of global industry revenues (IFPI, 2014).
[90] Ibid.

determining the emergence of new actors in the market notably at distribution level (e.g. aggregators and distribution platforms including e-retailers) and affecting the way music is produced and consumed as well as the way revenues are generated and delivered, both within and outside the sector (i.e. contents create enormous value for Internet intermediaries determining the success of web platforms such as YouTube, iTunes or Spotify).

As explained at the beginning of this chapter, this new 'digital ecosystem' is poorly measured by official statistics, either because of possible 'misclassification' of music companies under more 'ICT/new media related codes' or because detailed data on market evolutions simply fall outside the scope of European official statistics.

Considering the important changes that the music sector is undergoing, more comprehensive and detailed data on the sector's composition, sales (e.g. sales of sound recordings; sales of streaming or downloads) and income (e.g. performing rights income/royalties[91] from concerts or in relation to broadcasting and on demand delivery) would allow a more in-depth analysis of the sector's competitiveness. Not only the industry, but also policy makers do need this information to shape appropriate policies[92].

Data from trade associations and rights management bodies representing right holders in music (authors, publishers, artists, musicians and producers) may serve this purpose (even if their sectoral and geographical coverage is often partial). IFPI, for instance, publishes the annual review 'The Recording Industry by Numbers' and an annual report on the 'Digital Musical Industry' which is devoted to tracking the changes in business models (containing data on, for instance, use free or paid music streaming/download services, global digital revenues, global digital revenues by sector: downloads, physical formats, performance rights revenues, synchronisation revenues, etc.). The reviews are global and largely based on industry submissions worldwide. Figures are provided by the members of IFPI in the respective markets to the local IFPI group. IFPI applies a coverage factor to the figures to account for non-reporting companies (IFPI, 2012). IFPI revenue data for Europe is, like other global datasets explored in this report, available for a limited number of 22 countries (IFPI, 2012)[93].

Collecting Societies representing authors in the music sector collect a number of useful data on right holders and typologies of revenues, amongst which: the total number of registered members; categories of members and in percentage; breakdown of gender (male/female), age; living/deceased members; works represented; number of new works registered and exploited; users/ licensees; total collections of royalties; collections by type of rights: public performance (radio, television, cable, satellite, digital, multimedia, phono, live music, theatre, cinema, other), mechanical reproduction (radio, TV, video, synchro, phono, digital multimedia, others: private copy, resale right, lending, multimedia, karaoke etc.), online (performance/mechanical reproduction, download, streaming, subscription/tethered download, ringtone, on-demand, customised, etc.); collections by geographical area – balance of payments with third countries.

[91] A more in-depth work might be needed to better understand to which extent copyright royalties are included in broader official statistics for the sector (e.g. turnover, GVA, etc.). e.g. code 9002 'Support activities to performing arts' includes performing arts event production and presentation services, performing arts events promotion and organisation services including management of services for rights attached to artistic, literary, music works, except cinema and audiovisual works, and other performing arts support services. Copyright revenues are therefore likely to be aggregated into broader turnover figures of companies classified under this code.

[92] Whilst the Internet is considered as a major opportunity to increase the circulation of cultural content in Europe and beyond as well as make the CCS more sustainable, online dissemination of copyrighted content has not reached its full potential yet (e.g. download sales remain the principal source of digital revenue for record companies, but their value fell by 8 per cent in 2014, which is not necessarily compensated by the rise of streaming services (IFPI, 2015)). The Digital Single Market strategy and in particular the revision of the copyright directive are very much about how to increase online dissemination of copyright content.

[93] Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and UK provided revenue figures in 2011.

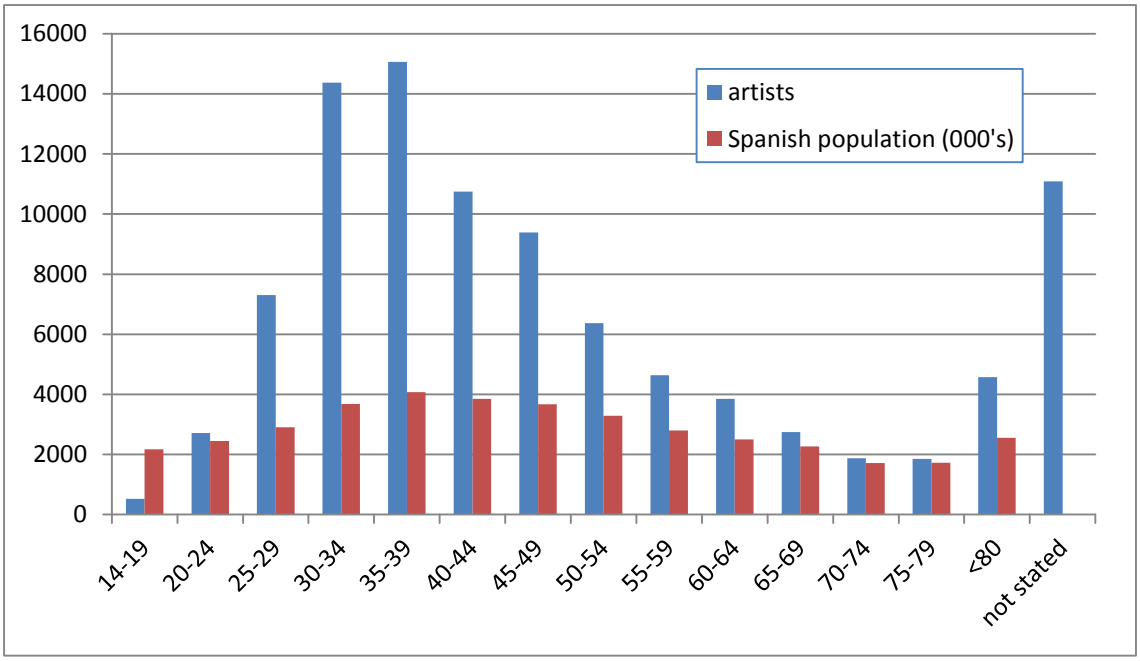
As from 2015, GESAC, the association grouping the 33 largest European Societies of Authors and Composers, will be releasing data on yearly basis on collective management. A report published in 2015 contains global (and aggregated) figures related to the number of registered right holders, number of licences granted as well as royalties collected and distributed (GESAC, 2015). Data are collected from 34 European authors' societies operating in 26 countries.

For performing artists, AEPO-Artis (Association of European Performers' Organisations representing 35 European performers' collective management organisations from 26 countries, 23 of which are established in Member States of the EU) could be a major source of information at European level. It is estimated that it represents between 400,000 and 500,000 performers. However, no data seem to be readily available online and further analysis is needed to verify if and what kind of data they collect (or they could collect in the future) from their members.

Despite their very good geographical coverage – CS exist in all the EU28 countries – the problem with data from CS is that they are not always accessible nor comparable across countries as they might be counted in different ways. Also, as already underlined in the section on books and press, data are not directly comparable with those provided by official statistics.

The Spanish Sociedad General De Autores y Editores (SGAE) is taken as an illustrative example to show potential and limits of CS data. SGAE is the main Collecting Society in Spain for songwriters, composers and music publishers, audiovisual authors, playwrights and choreographs.

Figure 2 – Breakdown of SGAE members by age 2012 compared to Spanish population 2013



At the end of 2012, it had 106,742 'direct' members of which less than 5 per cent were based outside Spain. SGAE (2013) publish an age breakdown of their membership (Figure 2 – Breakdown of SGAE members by age 2012 compared to Spanish population 2013). Figure 2 suggests a core 'creative' age of people in their 30s. With more work the figure could be rebased for a more precise comparison with official statistics.

The categories listed in Table 5 provide distinctions which are critical to the sector, but which often cannot be attained in official statistics because for instance sample sizes in national Labour Force Surveys would be too small to draw such distinctions.

Table 5 – Author members of SGAE by 'art'

Music		
Composers	64,160	
Lyricists	15,000	
	79,760	83%
Dramatic Arts		
Playwrights	6,730	
Choreographers	1,127	
	7,857	8%
Audiovisual		
Scenewriters	6,875	
Directors	2,589	
	9,464	10%
Total Authors	97,081	

Source: SGAE (2013)

In addition to the sources presented above, many other European but also national professional associations exist in the music sector and across its value which could serve the purpose of better data collection (such as IMPALA[94], FIM[95], etc.). National associations may be particularly active at improving data collection to better advocate for the sector and influence national policy making. The lobby group UK Music, for instance, has proposed a valuable alternative approach to improve data on the sector: by matching official statistics with industry data, it managed to better measure the music sector and capture its generated value.

Box 3 – UK Music: matching industry data and official statistics to better measure GVA in the music sector

To better calculate the UK music sector's contribution to the economy, the lobby group UK Music (2014a and 2014b) found a way to use industry intelligence to go beyond the limits of official industrial classification (SIC) while continuing to use the business data from the official national business register and the Annual Business Survey (ABS).

UK Music worked together with the UK national statistical institute ONS and the Department of Culture Media and Sports (DCMS) who annually release official statistics on CCS. It matched industry data from its members with official statistics (from the national business register and ABS) to get more accurate figures

[94] The Independent Music Company Association http://www.impalamusic.org/
[95] International Federation of Musicians (http://www.fim-musicians.org/) is the international organisation for musicians' unions, guilds and professional associations and is now counting about 70 members in 60 countries throughout the world.

on the sector.

The results were used to calculate GVA which was estimated at €5.34 billion[96], up 9 per cent year-on-year (€ 4.92 billion in 2012[97]) (UK Music 2014a, 2014b).

Last but not least, music networks may also be an interesting source of data with international coverage: in 2011 the European Jazz Network received support from the Creative Europe programme to produce evidence on the impacts generated by its members.

Box 4 – European Jazz Network

Born in 1987, European Jazz Network[98] (EJN) is a networking organisation whose mission is to promote and support the identity and diversity of jazz in Europe. It currently comprises 80 organisations who specialise in contemporary jazz and improvised music (including festivals, clubs and concert venues, independent promoters and national organisations) from 26 European countries.

In 2010, EJN obtained a grant from the Creative Europe programme (€ 11,567) to carry out a study collecting data on its members for the first time with the support of an external consultant.

Data on employment, turnover, jazz events' programme, the audience/attendance, etc. were collected from partner organisations who were required to complete an online questionnaire. 74 per cent of its members answered the main questionnaire (84 per cent taking into account the simplified questionnaire sent to non-respondents), mainly motivated by the willingness to make the case for jazz music.

Data collection is supported by a detailed methodology and quality check and validation performed by the research team. However, the network mainly had to rely on the accuracy of the data provided and in-depth quality check was not possible due to limited resources. It is suggested that more guidance to the members would be of help to support members in providing correct data (especially on employment).

Despite these limits, this study remains a good example of *ad hoc* data collection helping to better understand the economic and social impacts of music in Europe, on a very specific sample. The methodology adopted could be further explored and standardised and be shared amongst other networks in Europe as a source of inspiration to encourage data collection.

Video games

The video games industry does produce some data on the sector. These statistics mainly provide information on sales volumes and gaming habits, but no information on other key aspects is actually available (number of studios in Europe or number of titles produced).

The Interactive Software Federation of Europe (ISFE) commissions a quarterly survey of 'video gaming' habits in the US, the UK, France, Germany, Spain and Russia conducted by Ipsos. An on-line survey of 6,000 internet users per month, aged 6-64. An offline survey of 1,000 interviews a month (age 18+ but covering habits of 6-17 year olds), is used to weight the online results (Ipsos Media CT, 2014). The principal indicators cover the

[96] As converted in July 13th, 2015, from £3.8 billion.
[97] As converted in July 13th, 2015, from £3.5 billion.
[98] http://www.europejazz.net/

hours per week spent gaming, the age profile, the type of game (packaged, app, online) and platform (console, handheld, computers, smartphones, tablets). In 2012 a larger study in a similar vein was conducted in 16 EU countries[99] (Ipsos MediaCT, 2012).

However, more than industry statistics, the Internet is probably the most interesting source of information for this sector, due to the increasing 'migration' of video games to online platforms.

'Big data' approaches are for instance being tested by academics and research centres but also international institutions and statistical offices with a view to get much more exhaustive and in-depth data to support policy making (see also Chapter 1 infra-section 2.2). In Europe, 'big data' approaches to better map CCS (and more particularly video games) are being developed by NESTA, an UK independent charity having the objective to increase the innovation capacity of the UK. NESTA's 'big data' approaches could potentially be tested in any EU country. However, further investigation is needed to fully assess its applicability in other countries or contexts.

Box 5 – NESTA: a big data approach to measure the video games sector

NESTA's (2014) recent mapping of the UK video game industry takes on something of a 'hybrid' approach. Starting with official UK ONS data, it expands this first 'layer' of data with several business register sources (both broader consultancy, and sector specific deriving from industry associations) to identify further companies with some involvement in the video gaming sector. Finally, in a further 'layer' of information it adds in the results of a web-based search for companies whose web sites included key words describing their business function (the so called 'web scraping' technique). 1,902 video gaming companies in the UK were so identified against the 1,320 video games companies captured by the official IDBR data based on official SIC codes. The fact that more than 90 per cent of the companies identified are micro-companies somehow proves the potential of Internet data to capture small companies.

Finally, eSports (organised multiplayer video game competitions between professional players) is another gaming activity that is completely missing from official statistics. *Ad hoc* studies may offer an insight on video games as a spectator sport: according to a recent report by Superdata (2014), a company specialised in market studies on free-to-play gaming, digital console, mobile, PC downloadable, streaming media and eSports, more than 71 million people worldwide watched gaming competitions live or online in 2013. One third of the prize winning players in the top 20 countries are EU residents, and earned 17 per cent of the prize money available in 2014. The leading European player Ludwig Wahlberg of Sweden, aged 17 won € 287,048 in 2014[100].

Architecture

A number of data are regularly produced by the Architectural Council for Europe (ACE)[101], the representative organisation for the architectural profession at European level.

ACE carries out two major surveys. Every six months it carries out a survey on the economic climate for architects in Europe. Every two years it conducts a more comprehensive 'sector study', the last of which was completed in January 2015, covering 29 European countries (ACE, 2015a). The six monthly Economic Trends

[99] Sweden, Finland, France, Czech Republic, Netherlands, Norway, Belgium, Poland, Denmark, Germany, Austria, Italy, Switzerland, Great Britain, Spain, and Portugal.
[100] As converted on 16 July 2015, from $ 312,493 (Source: http://www.esportsearnings.com/players/5195-zai-ludwig-wahlberg).
[101] www.ace-cea.eu

survey is an opinion survey more than an operation to collect statistics on the operation of the sector. The biannual study is more statistical in nature and grounded in an on-line survey. The 2015 edition (ACE, 2015b) published figures for 31 European countries[102]. These surveys allow some additional analysis (data collected include, for instance: average revenue and profit for different sizes of practices, hourly rates, export earnings) but the main indicators can be calculated easily from official data.

Data on export earnings could be used as complementary information to official statistics on trade in services. Also, It might be interesting to benchmark data on the number architects from ACE with those from Eurostat considering that, under the new revision of the ISCO codes, it is not possible to separate architects from other building professions.

Advertising

Advertising is well defined in international statistics and easily identifiable as a commercial activity. All desirable economic indicators can therefore be derived from official statistics. The only major gap in economic statistics would seem to be for data on trade as there is no consistent data on trade for service industries (see the infra-section 4.4 on International Trade) and digital advertising.

Art crafts

Art crafts, or artisanal products are described as '*those produced by artisans, either completely by hand or with the help of hand-tools or even mechanical means, as long as the direct manual contribution of the artisan remains the most substantial component of the finished product. The special nature of artisanal products derives from their distinctive features, which can be utilitarian, aesthetic, artistic, creative, culturally attached, decorative, functional, traditional, religiously and socially symbolic and significant*'[103].

Although there are major problems in the way official statistics measure the crafts sector (see Chapter 2 infra-section 2.2), alternative sources cannot be of much help either in this case – especially at the European level.

Craft surveys are however becoming more common at national level. These are set up by national bodies such as ministries, development agencies (e.g. UK Crafts Council) or skills councils to collect additional data for instance on skills and education/training of craftsmen, sources of finance, the production process as well as marketing and distribution systems (Ellis 2015).

The UK even saw two surveys taking place recently at national level, one by the government (TBR 2012) and one by the UK Crafts Council (2014) which produced very different results even to the point of producing radically different proportions on men and women producers.

Two approaches have emerged for conducting artisan surveys: i) classed by materials (UNESCO, 2005), and ii) time use survey (Lo 2011, 2014). A full analysis of the merits and demerits of both would take up too much space (Ellis, 2013; Ellis, 2015). In sum, the strength of the first approach is its stress on 'natural' materials and handmade techniques, but its weakness is that many products 'fall between the cracks' and are classified as of mixed production. The second approach places more emphasis on ancillary, but critical, activities such as the time taken bringing items to market instead of production. It is however more time consuming.

[102] Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, and the UK'.

[103] Definition adopted by the UNESCO/ITC Symposium 'Crafts and the international market: trade and customs codification' - Manila, 6-8 October 1997.

Festivals

As festivals are not listed as a specific domain under ESSnet-Culture, ESSnet-Culture does not provide a definition for this domain. The 2009 UNESCO Framework for Cultural Statistics (FCS) categorises festivals under 'performance and celebration', further defining them as including '*all expressions of cultural events that occur locally and can be informal in nature*' (UNESCO, 2009).

Although there is no European organisation collecting exhaustive and comprehensive data on European festivals, key data can often be obtained from the festivals themselves. Major festivals have indeed established long term statistical data. These are dominated by visitor counts, numbers of performers, and spending. Numbers of both visitors and performers, collected through administrative sources, are often accompanied by sample surveys of demographics (UIS, 2015). These statistics are almost universally used to suggest the contribution of the event to the local economy.

Finland and Hungary have produced national methodologies for festival statistics.

Box 6 – Festival statistics: the methodologies developed in Finland and Hungary

A Finnish Event Evaluation Tool (FEET) was developed in 2007 (Pasanen, Taskinen, and Mikkonen, 2009) for use by small Finnish municipalities. It has three parts: customer profiles, economic, and social inputs and takes into account environmental impacts. Separate questionnaires are administered to organisers, attendees, local residents, local entrepreneurs, and policy makers. Economic assessment is based on an input-output model. Socio-cultural impacts are based on the attitude questionnaires using a Likert scale derived from Australian practice.

In Hungary, festivals applying for state grants have been required to register and provide statistics since 2008[104]. The scheme, which was renewed in 2014, was initiated by five national festival unions and is today managed by the Hungarian Festival Association in cooperation with the Budapest Observatory. The data collected on the registered festivals include management (council, private sector, charity, and association), audience figures, genre (arts, folklore, sport, music, gastronomy, dance, film and video, theatre, literacy, circus) international involvement, frequency and revenue. A rating system (Inkei, 2010) of festivals has also been developed by the Budapest Observatory with a view to assess the quality of the registered festivals and establish a national ranking. Both the registration and participation in the rating processes are voluntary-based.

4. Alternative sources for cross-sectoral data

4.1. Cultural capital

Cultural capital can be simplistically represented as a count of facilities, objects contained within them as well as cultural and creative goods produced by the CCS. In this sense, a number of sources identified in the previous pages can help collect this information, for instance: administrative sources from Cultural Ministries for lists of heritage sites and intangible heritage of international/national/regional/local significance, administrative sources from Cultural Ministries or EGMUS for data on number of museums and types of collections, ENUMERATE for number of digitised collections, EBLIDA for number of libraries, average number of e-resources and media stock and FEP for number of titles published. BACH also represents an interesting

[104] http://www.fesztivalregisztracio.hu/index.php?modul=cms&page=english

source of information in this area as it provides data on intangible assets (as a percentage of the total assets). For instance, in publishing, intangible assets represent a significant proportion of overall assets perhaps reflecting the values of authors' rights held by publishers[105].

However, such an approach does no more than presenting 'raw' data which should be made meaningful by transformation into a form of indicator measuring the value of these cultural and creative resources.

As the analysis of possible methodologies to assess this value goes beyond the purpose of this report, it suffices to say that *ad hoc* studies are usually needed to assess such value (see for instance PWC, 2008), especially for sectors the value of which is not easily grasped by official statistics (namely heritage, museums, libraries, visual and performing arts). The so-called contingent value (CV) analysis (including 'Willingness To Pay' and Travel Cost methods) has found widespread adoption to measure cultural capital including the 'non-use value' of historical and heritage sites (i.e. the value that these sites represent for those who never see them – key heritage sites such as the Coliseum, Stonehenge, or the Louvre can indeed serve as symbols for the country as a whole and can thus be part of commercial and national branding).[106]

IP (included as part of intangible assets in companies' financial accounts) could also help assess the value of cultural capital, but this has not yet been drawn into systematic assessments of CCS activities apart from some few but valuable examples[107].

4.2. Cultural participation

Cultural participation is an evolving concept: in the last decades, Internet and new technologies have profoundly changed the way we interact and engage with culture. A regular and comprehensive EU-wide survey based on the use of commonly agreed indicators that take into account recent evolutions would probably be the best tool to monitor cultural participation in Europe (i.e. a cultural and social participation module is occasionally included in the EU-SILC survey). However, in the absence of such a tool, various alternative sources can serve the purpose of measuring (at least partially, but more regularly) cultural participation in EU countries.

Administrative data form a core part of statistics on cultural participation. All major heritage sites and cultural institutions such as museums, galleries, libraries, cinema, and festivals collect data on the number of visitors. However, the major issue here is that methodologies to collate data and definitions may vary a lot as they depend on national systems, thereby affecting the comparability of administrative data (see also Chapter 1 infra-section 2.2).

A common key performance target of cultural institutions is to increase the annual number of visitors. While this is of interest to national authorities, many institutions such as the Louvre, the Tate, and the Prado are such

[105] Intellectual capital is recognised as a key economic asset in the context of the new economy. The ratio of intangible to tangible assets shows that an increasing amount of market value cannot be traced to tangible assets on the corporate books, passing from 38 per cent (intangible) vs. 62 per cent (tangible) in 1982, to 62 per cent vs. 38 per cent in 1992 to 87 per cent vs. 13 per cent in 2002 (Ludlow 2008): http://ipfrontline.com/2008/02/japanese-ip-typhoon-still-not-even-a-tropical-storm-ii/ - Accessed on 17 July 2015.

[106] The concepts of contingent value, cultural capital and non-use values are succinctly set out by Throsby (2010). For non-use values in formal cost-benefit analysis see Florio (2012: 111-3). Carson (2011) reviews over 5,000 CV studies showing that the technique has found widespread adoption.

[107] OHIM for instance has carried out studies on the value of IPR assets (including the copyright sector but not only – also trademarks, patents and so). See for instance: EPO, OHIM (2013). Intellectual property rights intensive industries: contribution to economic performance and employment in the European Union Industry-Level Analysis Report. https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/full_report/joint_report_epo_ohim.pdf
WIPO has also conducted research in this area. See, for instance: http://www.wipo.int/sme/en/documents/ip_valuation_fulltext.html

strong attractions that they can be said to have an impact at European level. The globalisation of such institutions suggests that such trends need to be monitored at EU level as indicators of broad global cultural influence. At world level, rankings of most popular exhibitions are regularly provided by The Art newspaper based on the data supplied directly by the institutions concerned[108].

Special Eurobarometer surveys are another important source of information. These are entrusted by the European Commission or other EU institutions to private specialised companies such as TNS opinion. The 2007 Eurobarometer Cultural Values survey and the 2013 Eurobarometer Cultural Access and Participation survey both covered cultural participation (e.g. '*How many times in the last twelve months have you: seen a ballet, a dance performance or an opera; been to the cinema; been to the theatre; been to a concert; visited a public library; visited historical monuments; visited museums or galleries; watched a cultural programme on TV or listened to such a programme on the radio; read a book?*') including specific questions on the use of the Internet for cultural purposes (e.g. '*What do you use the Internet for, in terms of cultural purposes? Visiting museum or library websites or other specialised websites to improve your knowledge, Playing computer game, interactive or not',* etc.). The two surveys provide data for 27 and 28 EU Member States respectively, which can be accessed for free[109]. However, only some of the 2013 results can be compared against those measured in the previous survey, due to modifications in some questions. Data are not comparable with Eurostat surveys either (i.e. AES and EU-SILC) due to different underlying methodologies and lack of standardisation in the wording of the questions. Another important issue here is that Eurobarometer surveys may cover different topics, depending on the requests of EU institutions and available resources, therefore cultural participation may not be regularly covered.

Sectoral cultural participation surveys are also occasionally run by private companies or professional associations. Data on video games habits, for instance, produced by the International Software Federation of Europe – ISFE[110] (percentage of people using video games), for instance, provide a good indication of cultural participation, although data are available only for a few EU countries (14) (Ipsos Media CT, 2012).

Last but not least, social media statistics, too, can be used to study 'virtual' engagement in cultural activities without needing to be physically attending a cultural event. For example, Table 6 shows the Top Twenty museums in the world in terms of Twitter 'followers' and Facebook 'likes': more than half of these museums are based in Europe (mostly UK and France).

Table 6 – Top Twenty Global Museums according to social media

	Facebook		Twitter	
Rank	Museum/Gallery	Likes	Museum/Gallery	Followers
1	Museum of Modern Art, New York	1,704,696	Museum of Modern Art, New York	2,007,688
2	Musée du Louvre, Paris	1,667,780	Smithsonian	1,399,241
3	Metropolitan Museum, NY	1,302,427	Tate, London	1,349,223
4	Saatchi Gallery, London	1,276,391	Saatchi Gallery, London	1,247,701
5	Museum of Islamic Art	758,808	Guggenheim Museum, NY	1,111,813
6	Tate, London	724,709	Metropolitan Museum, NY	891,752
7	British Museum	647,824	British Library	841,483
8	American Museum of Natural History	522,752	Natural History Museum London	726,625

[108] http://www.theartnewspaper.com/news/museums/17584/
[109] See: http://www.gesis.org/en/eurobarometer/data-access/
[110] http://www.isfe.eu/

9	Guggenheim Museum, NY	509,699	Andy Warhol Museum	723,982
10	Centre Pompidou, Paris	453,314	Istanbul Modern Art Museum	582,446
11	Prado Madrid	426,449	J Paul Getty Museum, LA	550,007
12	National Gallery London	385,074	Victoria & Albert Museum London	542,157
13	Musée d'Orsay, Paris	320,621	Whitney Museum	533,561
14	MoMAPS	291,068	Anubis Promo	525,894
15	Museo Frida Kahlo, Mexico	274,083	Brooklyn Museum	523,428
16	MOCA Taipei	253,378	S. Francisco Museum of Modern Art	488,691
17	Natural History Museum London	253,094	Bellas Artes	485,061
18	Fotografiska	247,871	LACMA	478,824
19	Van Gogh Museum	244,608	British Museum	474,450
20	Museo Reina Sofia	243,354	Science Museum London	462,946

Source: http://likealyzer.com/statistics/facebook/likes/category/Museum-art%20gallery, accessed 24 Feb 2015 and http://www.socialbakers.com/statistics/twitter/profiles/place/cultural-center/page-1-3/ accessed 25 February 2015.

While European surveys concern only people living in the EU, social media data can reflect global interest in EU culture through appropriate analysis of socio-demographic data[111].

Semantic analysis can tell even more about visitors. Eventbrite (2014), for instance, provides an analysis of social media 'conversations' about US music festivals by state. The analysis demonstrates both the power of social media, as evidenced by statistics, to create interest and encourage ticket sales, as well as the geographic distribution of the festivals and the interest associated with them.

Another way to examine people's patterns of engagement with cultural activities is by monitoring web search trends on Google.

Figure 3 for instance shows the results of weekly web searches for 'Performing Arts' for selected EU countries. There seems to be overall a general decline in the number of searches in all countries. The definitions used in Google Trends are not published but the website suggests that Performing Arts includes; 'acting and theatre', dance, opera, 'Broadway and musical theatre'.

Figure 4 shows weekly web searches since 2004 for what Google categorises as 'Fibre and Textile Art'. This seems to be a definition derived from TAFA[112]. The trends for Germany and Spain can be seen to rise, in relative terms, steadily from 2008 in the case of Germany and from 2011 in the case of Spain. By contrast interest in 'fibre and textile art' from Hungary and Poland has been static over the last 10-11 years.

This data can be produced for every sector listed in this report though the types of site visited may not necessarily conform to the statistical definitions of the sectors.

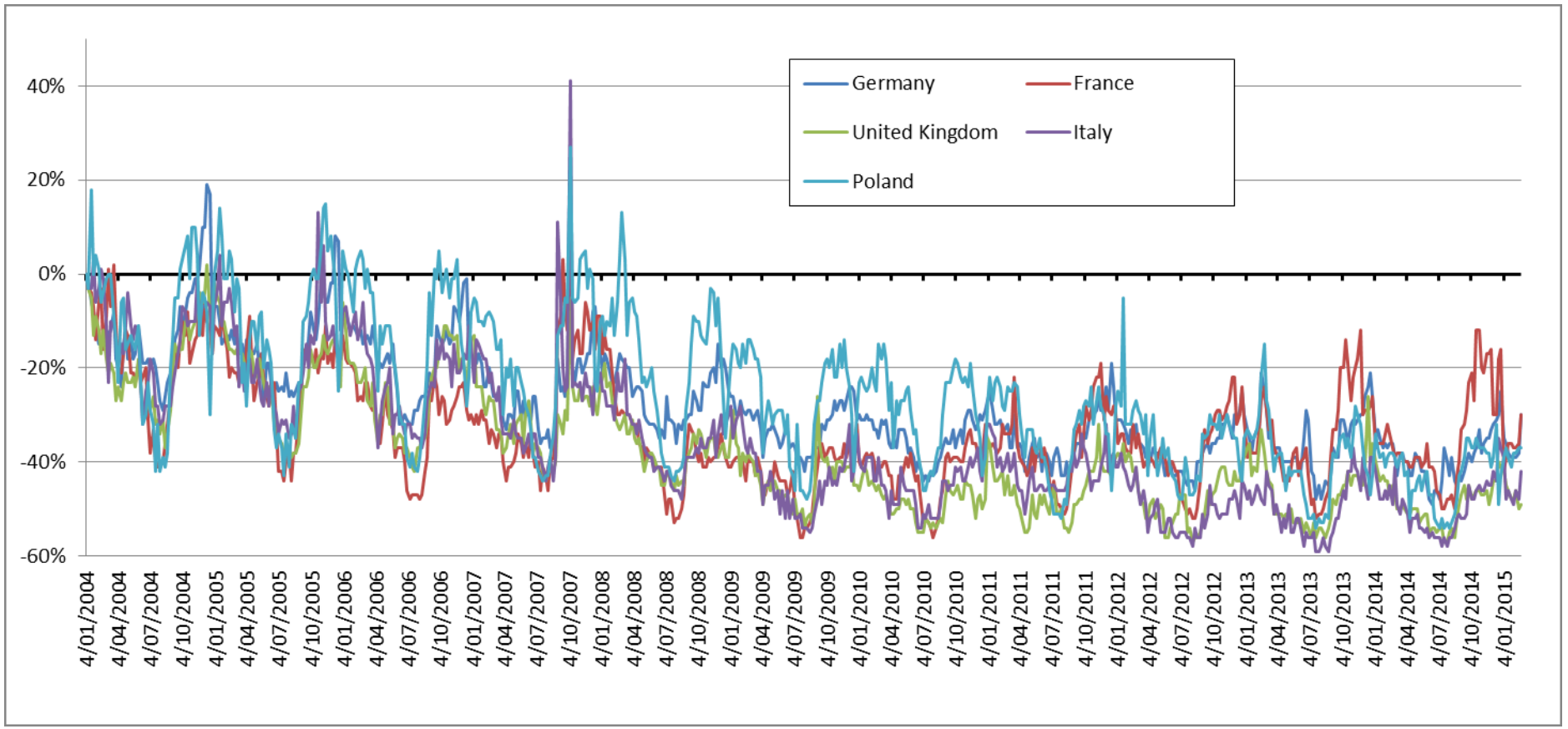
Google could also be an interesting source of information as regards 'virtual visits' to European art: the Google Art Project is an online platform through which the public can access more than 1,500 high-resolution images of artworks provided by the more than 250 art partners from 40 countries who have joined the project. Partners include various museums in Europe such as the Tate Gallery in London; the Uffizi in Florence; the

[111] These could be retrieved from Facebook or by crossing more sources – e.g. Facebook and LinkedIn, though this practice may raise important data protection issues.

[112] Textile and Fibre Art List is a grouping of 'handmade traditional and contemporary textiles and fibre businesses. TAFA's members may exhibit, sell, and teach.' (www.tafalist.com). Since we have been asked not to contact Google regarding statistics the origin of the definition cannot be confirmed.

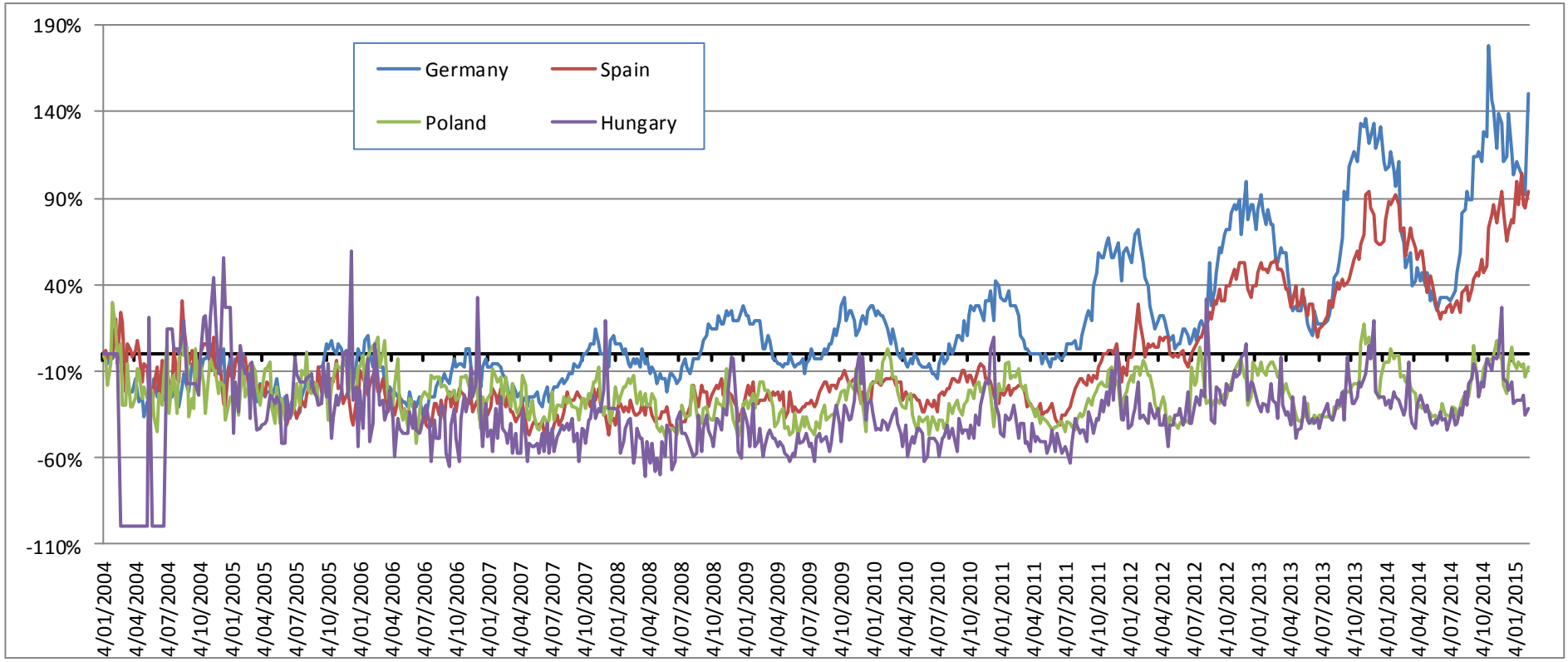
Pergamonmuseum in Berlin; the Museo Reina Sofia in Madrid and the Rijksmuseum in Amsterdam. However, the accessibility to data from the Google Art Project should be investigated.

Figure 3 – Weekly web searches for 'Performing Arts' as a share of total searches January 2004 to February 2015, selected EU countries, indexed to 2004



Source: Google Trends http://www.google.ca/trends/explore#cat=0-3-23&geo=DE%2C%0FR%2C%0GB%2C%0IT%2C%0PL&cmpt=geo&tz=

Figure 4 – Web searches for 'Fibre and Textile Art' by week as a share of total searches January 2004 to February 2015, selected EU countries, indexed to 2004



Source: Google Trends http://www.google.ca/trends/explore#cat=0-65-284-1230&geo=DE%2C%20ES%2C%20PL%2C%20HU&cmpt=geo&tz=

Notes:
Only five countries may be displayed at once. Data for UK and France follow an intermediate trend, rising more modestly towards the end of the period. Data for USA shows a late comparatively high rise.
Data cannot be disaggregated for smaller countries or for specific aspects of 'fibre and textile art'. However global data may be displayed for subcategories e.g. 'knitting' which follows the trend for Germany and Spain. High points correspond to Christmas/New Year, lows to summer.

4.3. Cultural diversity

Although the concept of cultural diversity has been widely used, especially since the UNESCO 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions, little has been said on the operationalisation of cultural diversity and the indicators it refers to.

As referred to at the beginning of the chapter, a common acceptance of cultural diversity is that of Andrew Stirling (1999) who defined cultural diversity as relying on three criteria: variety, balance and disparity. These criteria can be applied at the level production, distribution and consumption (for instance Benhamou (2007) finds that in the French publishing industry the variety produced/supplied is much greater than the variety consumed).

By crossing these two 'dimensions' of diversity (offer, consumption and distribution on the one hand and variety, balance, and disparity on the other) a very complex matrix is obtained. To illustrate the complexity of the topic and give a clearer idea of the high amount of data that would be needed to accurately assess diversity, the set of indexes used in Ranaivoson (2007) to measure diversity in the French music sector is presented in Table 7 – Cultural diversity indexes used in Ranaivoson (2007) (here consumed and distributed diversity are collapsed in a single dimension).

Table 7 – Cultural diversity indexes used in Ranaivoson (2007)

	Variety	Balance	Disparity
Supplied diversity	Share of distributors in all distributed titles {producer}		
	Number of new discs/albums {product}	Share of French new titles {product}	
		Share of available titles of French 'variété' {product}	
		Share of investment for French-speaking artists {producer}	
		Share of the major companies in broadcasted titles/diffusions/'contacts'/advertising {producer}	
		Mean weekly rotation rate of French-speaking titles {product}	
		Share of French-speaking artists/titles/diffusions/entries in play-lists on the radio {producer/product}	
		Share of new titles on the radio {product}	
		Share of entrances in play-lists among new/all titles {product}	
		Share of titles broadcasted more than *x* times {product}	
		Share in broadcasting of titles broadcasted more than *x* times {product}	
		Share of the yearly 100 amongst all broadcasts {product}	
Consumed diversity	Market share of distributors among distributed titles {producer}		
	Share of producers among titles in top 200 albums/top 150 singles {producer}		
		Market share of super- and hypermarkets {producer}	
	Number of sold discs {product}	Number of certified discs {product}	
		'Weight' of certified discs compared to total sales {product}	
		Market share of best sellers {product}	
		Share of French language titles among bestsellers {product}	
		Market share of French repertoire {product}	
		Market share of French 'variété' {product}	

Whilst methodological and data issues exist for all aspects of diversity[113] and these need to be closely examined and agreed to produce harmonised and comparable data on cultural diversity, it is worth noting that in some sectors, various data that would help measure cultural diversity (even if imperfectly) are already collected at European level, even if access may be restricted. These include, for instance:

- Produced diversity: share of local language in physical sales, airtime and downloads of local repertoire streamed on online music platforms from Nielsen[114]; number of titles published, number of genres represented from FEP[115];
- Distributed diversity: royalties from the use of European music repertoire abroad from collecting societies; share of repertoire (local/other EU/other repertoire), in physical sales, airtime and downloads from Nielsen; market share of genres from FEP; and translations sold in European and third countries, which is likely to be available from Amazon.
- Consumed diversity: top selling global albums and singles from IFPI; visited a historical monument or site/attended an exhibition in another EU country from Eurobarometer.

Eurobarometer surveys also offer some useful hints about 'consumed' cultural diversity in Europe: the 2013 Eurobarometer Cultural Access and Participation survey provides data on the number of people who have attended an exhibition or have been to a musical performance in another EU country.

4.4. International Trade in Services

As recalled at the beginning of this chapter, the major problem in trade data is that it does not cover services data satisfactorily.

Possible alternative sources to look at are:

a) Private companies such as Amazon and other major e-retailers for cross-border streaming and downloads of music, videos but also e-books as no physical goods are crossing borders (virtually no data exist in the public sphere for this category), although it remains to be checked whether and to which extent a private company like Amazon would make this information available;

b) Central Banks and National Accounts for foreign affiliates conducting cross-border exchange of services;

c) Some commercial/financial data (e.g. from VAT registers) for people travelling abroad to offer services e.g. architects working 'abroad', though movement of persons *between* EU member states cannot be monitored so precisely (which remains the major problem in this statistical area).

4.5. Finance

Finance is the 'holy grail' of cultural statistics and faces several extremely difficult issues which have rarely if ever been satisfactorily resolved. However, alternative sources are not necessarily of great help in this area.

[113] These issues have been discussed at length in work by UNESCO Institute for Statistics http://www.uis.unesco.org/Culture/Pages/cultural-diversity.aspx

[114] Nielsen is an American company. In addition to monitoring radio airplays, online streaming and music consumer behaviour, Nielsen tracks what music people are buying both in-store and digitally. Nielsen compiles data from more than 39,000 retail outlets globally, to understand what albums, singles and music videos people are buying, and where they're buying them.

[115] Cultural diversity data are also extensively available from EAO, for instance origin of fiction available on a sample of VoD catalogues and market share; number of non-national European films; number of countries of origin for television programmes (national, European, US); n. of admissions to cinema per capita, etc. However, as audiovisual is out of the scope of this study, these are not listed here.

As for private finance, companies, individuals and public agencies all record donations to cultural concerns in their accounts or tax returns. However, the figures concerned are presented in many different formats making it impossible to add them into one overall figure.

Where private company investment in the arts or other cultural activities is tax deductible (which is the case for various EU countries), national revenue agencies may be a source for such data.

5. Official statistics and alternative sources to fulfill Creative Europe's indicators requirements

As part of this assignment, the research team was specifically asked to assess to which extent existing data can help fulfil the data and indicators requirements of the Creative Europe programme. The following box recalls the main goals of the programme and supported actions.

Box 7 – Creative Europe Programme

With a budget of €1.46 billion, Creative Europe is the European Commission's framework programme for the culture and audiovisual sectors. It supports different kinds of activities in three main areas:

- Culture sector, including initiatives to promote cross-border cooperation, platforms, networking, and literary translation as well as outstanding European heritage and architectural, musical and literary works[116] and to support European Capitals of Culture;
- Audiovisual sector, such as initiatives to promote the development, distribution, or access to audiovisual works (including video games);
- A cross-sectoral strand, including a Guarantee Facility to facilitate access to loans for CCS (as from 2016) and transnational policy cooperation to support the exchange of experiences and know-how relating to new business and management models.

Whilst the calls related to the cultural and audiovisual sectors are managed by an external agency (the Education, Audiovisual and Culture Executive Agency – EACEA) under the supervision of DG EAC and DG CONNECT (as regards the cultural and audiovisual sectors respectively), the Guarantee Facility will be managed jointly by DG CONNECT and the European Investment Fund as regards more technical aspects.

Art. 18 of the Creative Europe regulation requires the European Commission to '*ensure regular monitoring and external evaluation of the Programme against the qualitative and quantitative performance indicators*' set out in the regulation.

Two categories of indicators are proposed (see Table 8 – Creative Europe's indicators and possible data sources for the complete list of indicators):

1. Indicators to measure the programme's performance in relation to its general objectives, namely:
    a) safeguard, develop and promote European cultural and linguistic diversity and to promote Europe's cultural heritage;

[116] Creative Europe supports the following prizes: EU architecture prize, European Union Award for Contemporary Music, European Border Breakers Award (EBBA), EU Heritage Prize, European Heritage Label, EU Literature Prize and Prix MEDIA.

b) strengthen the competitiveness of the European cultural and creative sectors, in particular of the audiovisual sector, with a view to promoting smart, sustainable and inclusive growth.

2. Indicators to measure whether the specific objectives of the programme have been reached, namely:

a) support the capacity of the European cultural and creative sectors to operate transnationally and internationally;
b) promote the transnational circulation of cultural and creative works and transnational mobility of cultural and creative players, in particular artists, as well as to reach new and enlarged audiences and improve access to cultural and creative works in the Union and beyond, with a particular focus on children, young people, people with disabilities and under-represented groups;
c) strengthen the financial capacity of SMEs and micro, small and medium-sized organisations in the cultural and creative sectors in a sustainable way, while endeavouring to ensure a balanced geographical coverage and sector representation;
d) foster policy development, innovation, creativity, audience development and new business and management models through support for transnational policy cooperation.

Official statistics but, more particularly, alternative sources can help fulfil these indicators' requirements. Building on the results benchmarking of Cultural Observatories and the mapping, as well as taking into account data that could be directly collected by the programme's managing bodies and beneficiaries, the following potential data sources have been identified:

- Eurostat, as regards overall indicators on the sectors (CCS' employment and, potentially, the contribution to the GDP);

- EAO and the MEDIA Films Database[117], as regards indicators related to the MEDIA sub-programme;

- DG EAC/EACEA as regards data on the number and composition of partnerships created;

- DG CONNECT as far as the Guarantee Facility is concerned (n. of loans, n. of beneficiaries, etc.);

- The programme's beneficiaries as regards data on access to cultural works and skills acquired, for instance. They include a variety of different actors, amongst which:

    - Cultural and creative organisations who are partners in cooperation projects, European networks, European platform projects or literary translation projects;

    - European cities which are awarded the title of European Capitals of Culture;

    - European cultural heritage sites or works which are awarded one of the prizes supported by the Creative Europe programme (see footnote 116).

- The members of the Open Method of Coordination (OMC) working groups and Cultural Affairs Committee (CAC) as regards policy development indicators.

However, whilst data from the first four sources are likely to be regularly available (but further investigation would be needed to confirm availability and quality of data from the MEDIA database, EAO, EACEA and DG CONNECT), data from the projects' beneficiaries, OMC groups and the CAC may be available only if *ad hoc* data collection is put in place.

[117] http://www.mfdb.eu/en/

A good example of dedicated data collection from funded projects is provided by the European Jazz Network: EJN ran a survey in 2011 to collect data on, amongst others, admissions to jazz venues, as described in Box 4 – European Jazz Network. However, data collection is only rarely performed by Creative Europe's beneficiaries and data are not necessarily comparable (for instance, taking again the EJN example, data on admissions are collected from partners but it is not guaranteed that these data are collected in the same way by all partners – i.e. they may not include admissions to free events). Clearer data requirements in the calls' specifications and statistical support might encourage the programme's beneficiaries to collect good quality data with a view to fulfil Creative Europe's indicators requirements (e.g. surveys could potentially be set up as part of the projects' deliverables). The closer specification and provision of indicators for Creative Europe can be a major spur to the implementation of the recommendations of this report and in itself would help address some of the problems identified here, by for example producing comparable data on access to European heritage sites.

Table 8 – Creative Europe's indicators and possible data sources

	Creative Europe's indicators	Possible data sources
Related to general objectives	1. Cultural and creative sectors' level, change in and share of employment and share of gross domestic product	– EU-LFS (for employment data)
	2. Number of people accessing European cultural and creative works, including, where possible, works from countries other than their own	– Web counts for each project, and dependent web sites e.g. of projects' partners (from host companies and Google Trends); – Surveys to be set up by projects' beneficiaries to monitor access to cultural and creative works supported by the programme (e.g. literary works, exhibitions, performances, etc.); – Administrative monitoring of visits to register socio-demographic trends of access to cultural works/heritage sites winning the European prizes funded by the Creative Europe programme; – Comparable surveys by European Capitals of Culture, before, during, and after ECoC events.
	3. Scale of international activities of cultural and creative organisations and the number of transnational partnerships created	– Administrative data (finance, employment, visitors) of overseas activities of major EU cultural institutions benefitting from the programme (e.g. national museums, and arts companies); – Reporting by European Commission/EACEA on the number of transnational partnerships created their financing and leverage.
	4. Number of learning experiences and activities supported by the Programme which have improved the competences and increased the employability of cultural and creative players, including audiovisual professionals	– Surveys to be set up by projects' beneficiaries, including tracking beneficiaries after completion of project.
Related to specific objective a) (support capacities)	5. Number of admissions for non-national European films in Europe and European films worldwide (10 most important non-European markets) in cinemas	– EAO based on data available from the MEDIA database.
	6. Percentage of European audiovisual works in cinemas, on television and on digital platforms	– EAO based on data available from the MEDIA database.
	7. Number of people in the Member States accessing non-national European audiovisual works and the	– EAO based on data available from the MEDIA database.

	number of people in the countries participating in the Programme accessing European audiovisual works	
	8. Number of European video games produced in the Union as well as in the countries participating in the Programme	- EAO[118] or DG EAC/EACEA based on data on the number of video games produced supported by Creative Europe under the MEDIA sub-programme.
Related to specific objective b) (promote transnational circulation)	9. Number of people directly and indirectly reached through projects supported by the Programme	- Surveys to be developed and run by projects' beneficiaries to assess achieved target groups; - Awareness surveys of Creative Europe programme (e.g. put a module in Eurobarometer).
	10. Number of projects addressed to children, young people and under-represented groups and the estimated number of people reached	- Surveys to be developed and run by projects' beneficiaries.
Related to specific objective c) (strengthen financial capacity)	11. Volume of loans guaranteed in the framework of the Guarantee Facility, categorised by national origin, size and sectors of SMEs and micro, small and medium-sized organisations	- Questionnaires to be prepared by DG CONNECT to gather relevant data from the financial intermediaries (yet to be selected) managing the portfolio of loans covered by the Guarantee Facility.
	12. Volume of loans granted by participating financial intermediaries, categorised by national origin	
	13. Number of SMEs and micro, small and medium-sized organisations benefiting from the Guarantee Facility, categorised by national origin, size and sectors	
	14. Average default rate of loans	
	15. Achieved leverage effect of guaranteed loans in relation to the indicative leverage effect	
	16. Number and geographical spread of participating financial intermediaries	
Related to specific objectives d) (foster policy development)	17. Number of Member States making use of the results of the open method of coordination in their national policy development	- *Ad hoc* data collection (e.g. surveys, consultations, focus groups) with the members of the OMC working groups and Cultural Affairs Committee (CAC).[119]
	18. Number of new initiatives and policy outcomes	

6. Conclusions

This chapter has identified and discussed data available and limits in both official statistics and alternative sources under different categories: administrative sources, business registers, sectoral and professional associations, the Internet and, to a lesser extent, Creative Europe supported projects.

It can be concluded that a high amount of data on CCS can be retrieved from Eurostat, including data on economic activity and jobs – amongst others: turnover, GVA, number of companies and number of people of employed, international trade of cultural goods as well as (to a lesser extent) cultural participation- essentially attendance at cultural events and sites. The most commonly used indicators in CCS' analysis and main Eurostat sources are summed up in Table 9.

[118] EAO is currently exploring to what extent video games may be included in EAO's regular data collection and information services.
[119] An independent evaluation of the Open Method of Coordination has already been carried out (Ecorys, 2013).

Table 9 – Most commonly used indicators in CCS' analysis and main Eurostat sources

	ECONOMIC ACTIVITY				EMPLOYMENT			CONSUMPTION/PARTICIPATION			FINANCE	
	Key indicators											
Sectors	No of compan.	Turn.	GVA	Trade	Full/part time	Sex	Age	No of visits	Spending	Internet use	Private*	Public
Heritage	--	--	--	Comext (antiques)	EU-LFS	EU-LFS	EU-LFS	AES 2011 (visited cultural sites)	--	--	--	Overall figure on public expenditure on culture collated from national accounts[120]
Museums and Galleries	--	--	--	--	EU-LFS	EU-LFS	EU-LFS	AES 2011 (visited cultural sites)	HBS (includes zoos)	--	--	--
Archives and Libraries	--	--	--	--	EU-LFS	EU-LFS	EU-LFS	--	--	--		--
Books and Press	SBS	SBS	SBS	Comext (only for physical items, i.e. not e-books)	EU-LFS	EU-LFS	EU-LFS	AES 2011 (read a book, n. of books read)	HBS	EU ICT 2012 (used Internet to buy or order books – including e-books, magazines and newspapers)	--	--
Visual arts	--	--	--	Comext (works of art, photography)	EU-LFS	EU-LFS	EU-LFS	--	--	--	--	--
Design	SBS	SBS	SBS	--	EU-LFS	EU-LFS	EU-LFS	--	--	--	--	--
Performing Arts	--	--	--	Comext (musical instruments)	EU-LFS	EU-LFS	EU-LFS	AES 2011 (attendance to live perform.)	HBS (includes cinemas)	--	--	--
Sound recording	SBS	SBS	SBS	Comext (recorded media such as CDs, DVDs, etc.)	EU-LFS	EU-LFS	EU-LFS	--	--	EU ICT 2012 (used peer-to-peer file sharing for exchanging music)	--	--

[120] Public expenditure at the EU level is generally assessed using the COFOG system. COFOG codes 8.2 'Cultural services' and 8.3 'Broadcasting and publishing services' are the most relevant. COFOG also has very broad codes for manufacturing but it is almost impossible to distinguish funding for service industries apart from Tourism. It is therefore not possible to obtain more than an overall figure for government funding (including costs of administration) of culture, and it is not possible to obtain EU-wide data on funding for creative industries.

Video games	SBS	SBS	SBS	Comext (video games and consoles)	EU-LFS[121]	EU-LFS	EU-LFS	--	HBS (includes games toys & hobbies)	EU ICT 2012 (used Internet to buy or order games, or upload games to websites)	--	--
Architect.	SBS	SBS	SBS	Comext (plans and drawings for architectural or other similar purposes)	EU-LFS	EU-LFS	EU-LFS	--	--	--	--	--
Advertising	SBS	SBS	SBS	--	EU-LFS	EU-LFS	EU-LFS	--	--	--	--	--
Arts and crafts	--	--	--	Comext (knitted or crocheted fabrics; embroidery in the piece; tapestries)	EU-LFS[122]	EU-LFS	EU-LFS	--	--	--	--	--

*It refers to donations, sponsorships, etc. and not to cultural expenditure from individuals (considered under cultural participation).

[121] Not clearly disaggregated.
[122] For certain occupations.

However, various data limitations have been identified. We can distinguish between 'specific' gaps that affect precise statistical areas (mainly business/economic and employment statistics) and 'transversal' gaps which affect various sectors and statistical areas at the same time (business, employment, trade, finance and cultural participation statistics).

'Specific gaps' mainly concern heritage and performing arts sectors and related economic statistics. Indeed, whilst business statistics are available from SBS for most CCS, key economic indicators such as GVA are not available for museums, heritage, libraries and archives, and performing arts as these are not covered by EU-SBS. As for employment data, a major problem is the level of detail provided by MS for ISCO and NACE codes (i.e. number of digits). Data on jobs is indeed difficult to obtain for all cultural occupations and sectors in the absence of data from EU-LFS at NACE4Digits*ISCO4Digits[123].

Both these gaps are currently being tackled by Eurostat, by enlarging the scope of SBS (a new regulation for SBS foreseeing the inclusion of NACE section R is currently under preparation, thus heritage and performing arts sectors will soon be covered) and through the development of estimation methods for cultural employment statistics based on available data.

'Transversal data gaps' depend on three main issues, namely:

- Limits in the international classification system: on the one hand, design/fashion and crafts are poorly measured by NACE and ISCO codes mostly due to the difficulty to appropriately define these sectors and related occupations. On the other, rapidly evolving sectors such as music and video games are not well captured by statistical codes due to the emergence of new companies that often work across music/video games and ICT and which risk being 'misclassified' under more ICT-related codes not included in the CCS definition. As a consequence, all data relating to such sectors/codes (n. of companies, turnover, GVA, employment, etc.) are affected by such limitations.

  The classification measuring public funding and private expenditure is also problematic, but this was less a focus of this research as it is not an area where alternative sources can be of much help.

- Limitations affecting specific statistical units or indicators which are of crucial interest to guide policy-making in the sector namely: micro-companies (which are very challenging to capture statistically), GVA (which is difficult to calculate for public-led or semi-commercial businesses e.g. national theatres, museums), international trade in cultural services (where data has yet to be captured) and cultural participation (where there is data from European official statistics but all using slightly different indicators).

- Non-coverage of CCS-specific dimensions by Eurostat: key aspects of the cultural and creative sectors simply fall outside the scope of official European statistics. These include data that would help measure:

  - The richness and total value of the cultural capital of Europe, for which specific techniques for evaluating the value of cultural assets are needed. These are usually based on contingent valuation (CV).

[123] However, according to Eurostat, to obtain such level of detail for NACE, the cost and burden for the NSIs would be enormous. In addition, the data obtained would be useless due to the few cases that this crossing (NACE4*ISCO4) would identify. Moreover, the obtained information would not fulfil the reliability standards and it would be an issue from a confidentiality point of view. Such data would not be significant nor publishable.

- The cultural diversity of Europe ('produced', 'consumed' and 'distributed') as a key and distinctive asset of the European project;

- The new economy and digital value chains, both in relation to new sales patterns and business model and new ways of engaging with culture through, for instance, social media.

In sum, on the one hand, business statistics are available for most sectors (but issues remain as regards micro-companies, GVA, and limits in NACE particularly for music, video games and fashion), statistics on international trade of cultural goods are satisfactory, and better employment statistics are being produced by Eurostat based on estimation procedures (although design and crafts remain difficult to be measured). On the other, cultural participation, international trade in cultural services and finance data remain highly problematic. As part of its four-year work plan, Eurostat is trying to identify potential solutions in these areas, too.

Alternative data sources will not necessarily help address the 'structural' gaps identified in official statistics (at least not in the short term). However, they can complement official statistics by providing data on those sectors which are currently not covered by European statistics (notably the 'heritage sectors') as well as by providing 'market intelligence' (even if partial) in those areas which are not covered by Eurostat (notably market evolutions in the new economy) but which require a constant monitoring, analysis and understanding for the development of appropriate policies for the sector.

The following table provides an overview of the main data sources identified per various typologies of data (economic activity, employment, cultural participation, cultural diversity, cultural capital and finance) to show more clearly where alternative sources may potentially help fill in the observed data gaps.

Table 10 – Main data sources (including both Eurostat and alternative sources) per various typologies of data (economic activity, employment, cultural participation, cultural capital, cultural diversity and finance)

Sectors	ECONOMIC ACTIVITY		EMPLOYMENT		CULTURAL PARTICIPATION		CULTURAL CAPITAL		CULTURAL DIVERSITY		PUBLIC FINANCE[124]	
	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources
Heritage	Comext	--	EU-LFS	Ministry records[125]	AES 2011 (visited cultural sites)	Eurobarom. 2013 (visited a historical monument or site)	--	Ministry records (n. of heritage sites)	Comext (as regards market share)	Eurobarom. 2013 (visited a historical monument or site from another EU country)	--	Ministry records
	--	--	--	--	--	Ministry records (visits)	--	CV valuations (*ad hoc*)	--	--	--	--
Museums and Galleries	--	BACH (GVA)	EU-LFS	Ministry records	AES 2011 (visited cultural sites)	Eurobarom 2013 (visited a museum or a gallery)	--	Ministry records (n. of museums)	--	--	--	Ministry records
	--	--	--	EGMUS (also volunteers)	HBS (includes zoos)	Ministry records (n. of visits)	--	EGMUS (n. of museums, types of collec.)	--	--	--	--
	--	--	--	--	--	EGMUS (n. of visits)	--	--	--	--	--	--
	--	--	--	--	--	Social media	--	--	--	--	--	--
Archives and Libraries	--	BACH (GVA)	EU-LFS	Ministry records	--	Eurobarom. 2013 (visited a public library)	--	Ministry records (n. of libraries)	--	--	--	Ministry records

[124] Only in relation to public finance. No satisfactory alternative sources were identified for private finance (sponsors, donations, etc.).
[125] However, the availability (and dissemination) of data in the field of culture should not be taken for granted. Future research should map the availability of statistical data from Ministries in each EU country in an exhaustive way, and carefully assess comparability issues.

Sectors	ECONOMIC ACTIVITY		EMPLOYMENT		CULTURAL PARTICIPATION		CULTURAL CAPITAL		CULTURAL DIVERSITY		PUBLIC FINANCE	
	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources
	--	--	--	EBLIDA	--	EBLIDA (visits to libraries)	-	EBLIDA (n. of libraries)	--	--	--	--
						Social media						
Books and Press	SBS	FEP	EU-LFS	FEP	AES 2011 (read a book and n. of books read)	Eurobarom. 2013 (read a book)	--	FEP (books titles published, annual sales)	Comext	Eurobarom. 2013 (attended an exhibition in another EU country)	--	--
	Comext	WAN-IFRA	--	Collecting Societies	EU ICT 2012 (used Internet to buy or order books/e-books), magazines, newspap.)	--	--	WAN-IFRA (newspap. published)	AES 2011 (read a book by an author from another EU country)	FEP (e.g. books titles published)	--	--
	--	Amazon	--	--	--	--	--	BACH (intangible assets)	--	Amazon (e.g. e-book sales in different countries	--	--
Visual arts	Comext	TEFAF	EU-LFS	--	--	Eurobarom 2013 (visited a museum or gallery)	--	TEFAF	Comext	TEFAF	--	--
Design	SBS	--	EU-LFS	Occasional studies	--	--	--	--	--	--	--	--

Sectors	ECONOMIC ACTIVITY		EMPLOYMENT		CULTURAL PARTICIPATION		CULTURAL CAPITAL		CULTURAL DIVERSITY		PUBLIC FINANCE	
	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources
Perform. Arts	Comext	--	EU-LFS	National registers of performing artists	AES (attendance at live performances)	Eurobarom. 2013 (attended live perform.)	--	Ministry records	Comext	Eurobarom. 2013 (various, e.g. been to a musical performance from another EU country)	--	--
	--	--	--	Theatres' accounts	--	Admin. records	--	Operabase	--	Operabase (performance per composer, singers, and per capita)	--	--
	--	--	--	Collecting Societies	--	Social media	--	BACH, Amadeus (intangible assets)	--	--	--	--
	--	--	--	--	--	Google Search Trends for 'Perform. Arts'	--	--	--	--	--	--
Sound recording	SBS	IFPI (e.g. revenues from different kinds of sales and rights)	EU-LFS	Collecting Societies	EU ICT 2012 (used peer-to-peer file sharing for exchanging music)	Social media	--	IFPI (n. of titles published)	Comext	Download and streaming platforms, private database (e.g. Nielsen)	--	
	Comext	Collecting Societies (e.g. revenues from licensed rights)	--	--	--	--	--	--	--	--	--	--
Video games	SBS		EU-LFS	--	EU ICT 2012 (used Internet to buy or order games, or upload games to websites)	ISFE (consumer habits)	--	--	Comext	--	--	--

Sectors	ECONOMIC ACTIVITY		EMPLOYMENT		CULTURAL PARTICIPATION		CULTURAL CAPITAL		CULTURAL DIVERSITY		PUBLIC FINANCE	
	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources	Eurostat	Altern. sources
	Comext	--	--	--	--		--	--	--	--	--	--
Archit.	SBS	ACE	EU-LFS	ACE	--	--	--	BACH (intangible assets)	Comext	--	--	--
	Comext	--	--	--	--	--	--	--	--	--	--	--
Advert.	SBS	--	EU-LFS	--	--	--	--	BACH (intangible assets)	--	--	--	--
Arts and crafts	Comext	Occasional studies	EU-LFS	Occasional studies	--	Google Search Trends for 'Fibre and Textile Arts'	--	--	Comext	--	--	--

Additional alternative sources than those referred to in Table 10 have been identified to fill in the Creative Europe's indicators requirements. The analysis suggests that whilst Eurostat, EAO, MEDIA Films Database, EACEA and DG Connect (may) have some readily available data as regards employment (from Eurostat) and Creative Europe supported actions (n. of film productions funded, n. of international partnerships created, etc.), most indicators (e.g. number of people accessing European cultural and creative works) require *ad hoc* data collection targeting the cultural and creative organisations and 'products' directly supported by the programme (e.g. films, exhibitions, performances, heritage sites, etc.).

Despite the high amount and variety of data collectible from alternative sources, however, these cannot really replace or be compared to official statistics without serious investment in harmonisation and quality control. Alternative sources are useful to get a more comprehensive view of CCS and, in some cases, are even the sole source available for certain typologies of data (e.g. digital sales or streaming services), but users should be aware of their limits.

First, geographical coverage is often sparse as some countries may not be covered or, even when covered, relevant data collection institutions at the national level may not engage (e.g. some professional associations do not get data from some countries, even if covered). Also, even if all European countries are represented, professional associations may gather data only on their members but it is not clear what proportion of the market these members represent.

Secondly, as data are not specifically produced for statistical purposes, internationally agreed definitions, standards and quality criteria (such as the Quality Assurance Framework of the European Statistical System) are often not applied by alternative data providers. For instance, data on companies are not classified under NACE codes by trade associations (but there are ways to overcome at least partially this problem e.g. UK Music used VAT numbers to benchmark companies against the official government business register (IDBR)). Museum data from EGMUS are problematic, too: although EGMUS members agreed on definitions and explanations, data are not always comparable as national statistics may cover different types of museums (e.g. only museums which are financed by the state, or professionally-run). Collecting Societies also pose an issue as regards the employment status of their members: whereas official statistics considers the effective activity, CS derive employment figures from rights. As a consequence, artists who have been inactive for a number of years can still draw revenue from reproductions and be included. Likewise, rights may have been transferred to heirs, who are not active, and do not belong to the sector.

Thirdly, alternative data are often not comparable with official statistics, and not even between countries within the same dataset. This issue can concern trade and professional associations as well as Internet data (which requires standardisation e.g. Google uses its own definition of 'Fibre & Textile Art' for search trends which does not necessarily correspond to the statistical definition of crafts) and Cultural Observatories (in the sample of this study, data of EAO seem comparable, as opposed to EGMUS). Administrative sources depend on countries' legal provisions so comparability across countries may not be possible. Business registers are satisfactory as far as data comparability is concerned, though they too depend on data submitted under a variety of public accounting legislation so the way companies are registered may change.

Fourthly, accessibility is often very much limited, especially (but not only) for privately owned sources such as business registers, professional associations' data or private commercial platforms (e.g. Amazon).

A 'CCS Data Map' has been completed to provide a more exhaustive overview of the main alternative datasets analysed and gaps in relation to: type of data (census/survey), coverage of CCS, material scope, target population, statistical unit, geographical scope, time coverage, main methodological features, sample size, use of international standards, comparability issues, frequency of publication and relevant links. This is available as a separate Excel sheet.

CHAPTER 3 – CONCLUSIONS, RECOMMENDATIONS AND SCENARIOS

1. Introduction

Since 1995, the year of the adoption of the resolution of the European Council on the promotion of statistics concerning culture and economic growth, several efforts have been made at European level to improve the volume, range and quality of statistical information available in the field of CCS. The ESSnet-Culture group, in particular, was given the mission to develop the EU methodological base for the future generation of cultural data and to improve coordination between Member States. In December 2011, it proposed a new reference system for cultural statistics based on existing statistical classifications and European-wide data sources.

Eurostat has recently started a new project (2014-2018) aimed at revising and implementing, as far as possible and within resource constraints, the ESSnet's methodological framework. This work should lead to better CCS statistics, particularly as regards employment, international trade in cultural goods and business data. A new set of data on employment and international trade in cultural goods is already available on Eurostat's website – in a new dedicated section. Eurostat will also look into possible solutions for the production of continuative statistics in the field of cultural participation and practices, private expenditure and public spending on culture, and international trade in cultural services.

Statistics increasingly guide policy actions. They also enable the measurement of their impact. Culture production and investment have a wide range of policy impacts on jobs and growth, representing 3,3 per cent of the European GDP and 6.7 million jobs – 3 per cent of total EU employment (European Commission, 2010). But cultural activities have more than an economic value: they contribute to social wellbeing and knowledge, enabling the expression of singularities and identities, intercultural dialogue between people as well as creativity and innovation.

The availability of relevant, accurate and timely information on CCS is critical to addressing important policy questions: do CCS contribute to value creation and jobs? Is Europe competitive in the CCS and well positioned to develop a creative economy? Is the EU a net importer of cultural production or a net exporter? What is the specialisation of EU countries? Can we measure CCS' contribution to innovation? Does the EU do enough to stimulate culture-based creativity[126]? Is the Digital Single Market supporting the development of CCS in Europe and what is its impact on the cultural offer and the diversity of this offer? How original is the CCS in Europe compared to other trading blocs and what are its specificities?

The mapping shows that Eurostat collects a large amount of data on CCS as regards economic activity (number of companies, turnover, GVA, etc.), employment (total number of occupations and occupations per socio-economic demographic variables such as sex and educational level), international trade in cultural goods and (to a lesser extent) cultural participation.

European CCS statistics remain, however, confronted with specific challenges:

- They are not considered as a priority area of activities by statistical bodies and the available data are subject to infrequent data collection (particularly on cultural participation) – although Eurostat's four year work programme is expected to propose solutions to ensure more regular release of data on the sector;

[126] Culture-based creativity is creativity that comes from artists, creative professionals and the cultural and creative industries. It is linked to the ability of people, notably artists and creative professionals, to think imaginatively or metaphorically, to challenge the conventional and to call on the symbolic and affective to communicate (KEA, 2009).

- The CCS are not a sector from a statistical view point: the NACE classification was mainly created to classify economic activities. Due to the multidimensional nature of the CCS (e.g. economic and social) and their constant evolution, however, CCS are not easily identifiable under this classification. This entails a number of challenges: 1) from a statistical point of view the CCS need to be 'created' by collating different NACE codes and by extracting the 'cultural' or 'creative' activities from relevant NACE codes – this is a challenging task; 2) some cultural and creative sectors (and occupations) are simply very much difficult to define, notably design and art crafts, and no appropriate codes at the moment exist to exhaustively and precisely measure them; 3) as CCS are rapidly evolving (e.g. music, video games) current standards may require revision in order to avoid 'misclassification' of companies working in areas related to the New Media and the ICT domains (e.g. Spotify – a new media company relying exclusively on music content – currently escapes from CCS statistics).

- CCS' national estimates are rarely comparable: while a European definition has been proposed by ESSnet-Culture, EU Member States are still using different definitions of CCS (e.g. Italy includes gastronomy) and, even when using the same definitions, the codes included or the way the 'cultural' part of NACE and ISCO codes is calculated can change significantly. For instance, ESSnet's definition does not include video games and advertising to the same extent as UK or Sweden: whilst ESSnet includes only one NACE code for video games, UK and Sweden include two. Similarly, whilst UK and Sweden include three NACE codes to measure advertising, ESSnet only includes one (see footnote 22);

- The sector is composed of a high number of small and micro-companies (estimated at 90 per cent of the sector). Data on micro-companies are difficult to grasp fully through official statistics. This is a major problem as the economic value of the sector can be importantly underestimated if very small companies are not correctly taken into account. This measurement problem is more serious now than ever as the Internet has lowered the barriers to the market and multiplied opportunities to start a creative business;

- It is notoriously challenging to calculate the value of the output of non-industrial sectors such as museums, galleries and libraries but also performing arts or (in enlarged definitions of CCS) gastronomy: the value of much cultural and creative work is more related to quality than quantity, which is difficult to measure statistically;

- Whilst the EU is a major producer of copyright royalties in the world (for instance, approximately € 5.1 billion are collected worldwide from music publishers', authors' and songwriters' rights (GESAC, 2015)), revenues from copyright and neighboring rights do not clearly emerge from official statistics. This is because they are normally aggregated in broader figures such as the sector's turnover (see footnote 91): this is detrimental to a good understanding of CCS' economic performance as well as royalty flows between the EU and third countries;

- As the Internet and new technologies develop, CCS undergo important changes across the whole value chain (production, distribution and consumption). Whilst it is crucial to know and understand these changes, detailed data on the following simply fall out of the scope of European official statistics:

    - Online sales, downloads and streamed music/videos;
    - Digital advertising activities;
    - Turnover and revenues resulting from online services featuring CCS' productions (aggregated in broader turnover figures);
    - Overall market share of cultural contents distributed online compared to other online goods;

    - Usage of Internet and social media for 'cultural purposes' (which might have important impacts on access to culture and audience development).

- The market penetration of local cultures in other European or non-European territories is not measured by current European official statistics, thus making it more difficult to measure the impact of policy on cultural diversity which has to be promoted under EU Treaty rules.

On the basis of the above, it is evident that unless more resources are devoted to collect better CCS data at both European and national level, it will be difficult to achieve meaningful progress. This is required if the EU is willing to support the development of a creative economy and gain a better understanding of the next generation of industrial activities.

A reliable set of data is important for building policies as this enables the EU to identify the competitive strength of its CCS and develop a better understanding of market evolution to be able to adopt appropriate economic and innovation policies. It also serves, for instance, the conducting of more meaningful trade negotiations or trade promotion activities in third countries.

Considering the challenges listed above, it is important to consider alternative data sources and understand how they could be mobilised to complete existing official statistics.

A number of alternative sources have been identified as part of this assignment and they can be classified into two main groups:

- Sources collating data for various purposes and from which data on CCS can be extracted:

    - Administrative sources
    - Business registers
    - Sectoral and professional organisations (including rights management bodies, so called 'Collecting Societies')

- Sources collecting CCS data as part of their mission:

    - Cultural Observatories
    - *Ad hoc*, mostly temporary, projects dedicated to data collection, often for advocacy purposes (e.g. Creative Europe supported projects).

From these sources, various collectable CCS data have been identified, namely:

- Data on economic activity and jobs including, amongst others, data on employment, (e-)sales, downloads/streaming services and usage, turnover, revenues, financial structure, intangible assets or copyright royalties for different licensed rights. This kind of data is mainly gathered by professional associations, business registers, and private companies;

- Data on cultural participation, including visits to museums, libraries and consumption habits, mainly available from sectoral organisations (EGMUS, EBLIDA), professional associations (e.g. ISFE) or *ad hoc* surveys (e.g. Eurobarometer) as well as web-based data (e.g. Facebook likes and number of Twitter followers; web search trends of culture-related words or visits to virtual galleries e.g. via the Google Art Project);

- Data on cultural diversity, including data on genres produced, for instance, and sales in different markets. Such data are mainly available for the audiovisual sector and, to a lesser extent, the publishing sector. Major sources are private databases (notably from Nielsen as regards music sales)

and professional associations (e.g. FEP for and IFPI). Eurobarometer surveys also provide some data on the 'consumption' of cultural services (notably exhibitions) by European citizens in 'other' European countries;

- Additional data and expert analysis resulting from *ad hoc* data collection and research activities performed by Cultural Observatories and occasional projects, including:

    - in-depth data on the audiovisual industry (from EAO), data on the state of cultural heritage digitisation in Europe (from ENUMERATE), data on museums (from EGMUS.), data on public funding of culture and prices of cultural goods and services as well as qualitative information on cultural policies (from Compendium of Cultural Policies and Trends in Europe), and qualitative opinions on the state of cultural policies in Europe (from Budapest Observatory);

    - data on Creative Europe supported actions (e.g. the number of projects funded) and projects (e.g. economic and cultural participation data from the members of the European Jazz Network).

Alternative data would not necessarily help solve the problems encountered in official statistics. On the one hand, some gaps require the direct commitment of statistical bodies (notably in relation to the revision of international classifications which would involve Eurostat, NSIs as well as UNSD[127] and ILO[128]). On the other hand, alternative data cannot be readily integrated into official data collections as they do not fit international statistical standards nor do they follow the Quality Assurance Framework of the European Statistical System.

Nevertheless, alternative sources remain a valuable complementary source of information to help shape European policies, especially if subject to better harmonisation and quality control. Regular collection and delivery of alternative data would contribute to:

- Gathering evidence, in the short term, on sectors currently little covered by European official statistics, notably the 'heritage sectors' (i.e. by collating data on heritage sites, museums and libraries from national ministries, EGMUS and EBLIDA);

- Adding new insights and providing 'market intelligence' in areas which fall outside the scope of European official statistics to understand better the business potential and needs of CCS, particularly new sales patterns and delivery methods, and new forms of engagement in cultural activities (e.g. by gathering data already collected by professional associations and private companies);

- Improving official statistics in the long term (particularly in relation to micro-companies and GVA) through the development of new mapping methods based on the use of Internet data (i.e. 'big data' approaches) as well as data from professional associations (see Box 3 – UK Music), business registers (see EAO's experience in Chapter 1 infra-section 2.2), or Cultural Observatories (see Box 1 – Destatis' project to get more and better CCS data from Cultural Observatories (Germany).

The ambition of this final Chapter is to make concrete proposals to remedy identified insufficiencies and bottlenecks in data collection and usage. As explained in the methodology, however, harmonisation and

[127] The United Nations Statistics Division (UNSD) serves under the United Nations Department of Economic and Social Affairs (DESA) as the central mechanism within the Secretariat of the United Nations to supply the statistical needs and coordinating activities of the global statistical system.
[128] The International Labour Organization (ILO) is a United Nations agency dealing with labour issues, particularly international labour standards, social protection, and work opportunities for all 185 of the 193 UN member states are members of the ILO.

comparability issues, amongst others, were not fully analysed due to the limited scope of this research. Further research would be needed to assess such important aspects.

Proposals ensure that synergies with pre-existing structures (those identified in this study but also other relevant institutions active in the field of CCS) are duly taken into account in order to integrate as much as possible existing resources and expertise, and avoid duplications.

2. Proposed measures

As a result of the mapping exercise, we are proposing specific measures to policy makers which address the identified shortcomings whilst building on the work already achieved in the field of CCS statistics. They mainly aim at:

- Reconsidering CCS in international statistical classifications;
- Better measuring of the sector and capturing of its specificities;
- Collecting statistical data from alternative data sources, such as sectoral and trade associations, Collecting Societies, business registers and the Internet 'big data' to help gain a better understanding of the sector;
- Refining the quality and comparability of data from alternative sources;
- Providing EU institutions with new collection tools to complement Eurostat's activities and regularly provide policy-related statistical evidence.

The proposals aim at making the best of existing resources in order to take into account budgetary constraints. Considering the EU's global competitive position in the CCS, however, there is a strong case for improving statistical information at EU level.

Two categories of proposals are proposed:

- Measures to obtain more detailed statistical data and data relevant to market development;
- Measures to gather alternative data and develop indicators to serve the implementation of cultural policy priorities.

For the second set of measures, we have identified, by way of illustration, two policy priorities with a view to prioritising data required which would assist policy making, namely data to assess cultural participation and data on cultural diversity. The identification of priority policy fields is a convenient way to limit resources invested in data collection by allocating resources to specific themes focused on guiding precise public actions.

The proposed measures are detailed below.

1. Improve overall statistical information on CCS

1.1. Improve coverage of CCS in economic statistics

The mapping has shown that European official statistics on the CCS are quite substantial and capable of giving a good overview of the economy of the sector. Data gaps are mainly due to deficiencies in the international standards as well as to limits regarding specific statistics units or indicators, notably micro-companies, GVA and volunteers. These gaps do not allow a precise and exhaustive set of economic data on CCS. They particularly affect music, video games, fashion, crafts, museums, galleries, and libraries, performing and visual arts.

To address these shortcomings, it is proposed to the European institutions to:

- Invite Eurostat in coordination with NSIs to propose amendments to existing international codes when a revision of this classification will take place in the relevant international bodies (notably the UN Expert Group on international statistical classifications and UNSD for ISIC/NACE[129]), in relation to video games and music (which may require a redefinition of the sectors and reclassification in existing codes to better take into account technological developments);
- Engage more effectively with national institutions, foundations and trade associations to work out more and better statistical definitions with a view to addressing statistical gaps. For instance, the fashion and crafts industry should be given the opportunity to contribute to the setting up of a statistical definition which does justice to the importance of the luxury and craft industry to the European economy. Also, the industry could help policy makers and statisticians better understand evolutions in the music and video games business and guide revision of international standards to take into account the digital shift;
- Encourage and support NSI's as well as Eurostat's efforts to increase dialogue with the museums' and libraries' representatives (e.g. EGMUS[130] and EBLIDA) to develop appropriate definitions and capacities helping gathering more comparable statistics, including GVA, for these sectors (GVA for museums and libraries is for instance available from the business register BACH);
- Commission the development of relevant methodologies to gather key economic data from major arts festivals in Europe (film, music, performing arts) – the list would be determined by the EC in consultation with the Council and the European Parliament;
- Entrust a specialised research centre or *ad hoc* structure to be set up to develop 'big data approaches' to improve the mapping of the sector.

It is suggested that these recommendations are followed even if their implementation is likely be completed only in the very long run, particularly as regards the revision of statistical classifications.

1.2. Improve data on cultural employment

The creation of new jobs as well as the development of creative competences to boost innovation and competitiveness is a major priority for the EU.

Today, official employment statistics only partially grasp the number of creative professionals and artists working in Europe. Data are limited because of the insufficient level of details provided by Member States for 'partially cultural' occupational codes and limitations in ISCO codes (especially for designers and craftsmen). Also, no data on volunteers are available from the EU-LFS as volunteering activities are out of EU-LFS' scope.

In order to address these gaps, it is recommended that the European institutions:

- Invite Eurostat in coordination with NSIs to propose amendments to existing ISCO codes when a revision of this classification will take place in the relevant international bodies (notably the

[129] NACE classification is fully compatible with the UN ISIC (International Standard Industrial Classification, in custody of United Nations). A revision of NACE can be started only after revision of ISIC managed by UN. For the moment there are no plans of revision for this classification. Such amendment processes would require several years before an agreement is reached.
[130] Eurostat will meet EGMUS in the coming Autumn (2015) in the in order to get information on their activities as well as understand to which extent EGMUS statistics can be used at a pan-EU level (Source: Meeting with Eurostat on 29.06.2015).

International Labor Organisation (ILO)), for example in relation to art crafts (as design remains difficult to define, even by professionals)[131];
- Gather data on volunteers in museums with the help of EGMUS, and build on EGMUS' initial cooperation with Eurostat (see footnote 130) to adopt appropriate methods to attach a monetary value to volunteers' time to better assess the GVA of the museum sector.

1.3. Improve coverage of sales and usage patterns linked to digital delivery methods

Technological changes and market developments have been marked by the emergence of new actors such as digital platforms and aggregators in the CCS' value chain, triggering radical changes in sales and usage patterns. Cultural and creative productions are, therefore, increasingly consumed as part of services (streaming, downloads but also broadcasting and concerts) or purchased on online platforms (e-sales). It is not surprising, therefore, that today half of the revenue from the music industry is based on licensing of copyright rather than sales of packaged products (IFPI, 2015). The same is true for video games, and such revenues are increasing rapidly in the publishing and audiovisual sectors. The advertising sector is also profoundly affected by the digital shift as advertising is increasingly moving to digital platforms.

European official statistics measure these services only in terms of generated turnover (e.g. companies' turnover also includes turnover from these services). However, it is not possible to isolate figures linked to, for instance:

- Rights licensing activities;
- Online advertising activities;
- Tracking numbers of downloads, songs streamed, concerts performed, broadcast performances and e-sales of cultural products;
- Cross-border circulation of 'intangible' cultural goods, notably books (including e-books but also sound recordings – a major gap in trade statistics);
- The market share of local vs. international cultural content distributed on-demand or through subscription.

Detailed data on new distribution and sales patterns would help improve the understanding of the sector, its evolutions and competitiveness.

In order to address these gaps, European institutions should:

- Engage with European trade and professional associations, rights management bodies but also foundations and public institutions such as Cultural Observatories, to obtain economic data, especially in relation to sectors which have been particularly affected by the digital shift (i.e. music, publishing and video games);
- Engage with large companies and private data providers such as Nielsen (which owns a rich database on music sales including online), or e-commerce and streaming platforms to obtain more in-depth data on the sector's new sales patterns (e.g. downloads, streaming, etc.) and cross-border trade of cultural products and services.

[131] The custodian of ISCO is ILO and Eurostat has no power of decision on starting a revision of this classification. For the moment there are no plans of revision for this classification. Such amendment processes would require several years before an agreement is reached.

2. Development of data sets to address policy priorities

2.1. Data to measure cultural participation

Cultural access and audience development are a major priority of the European Union (see, amongst others the EU Work Plan for Culture 2015-2018 and the Regulation implementing the Creative Europe programme). In particular, policy makers would like to make the most of digital tools with a view to democratising access to culture.

European data on cultural participation are occasionally collected (e.g. *ad hoc* module on 'Social and cultural participation' in EU-SILC).

Moreover, whilst Internet and social media have rapidly changed the way cultural productions are accessed, official statistics have yet to account for new cultural participation practices. This is an important gap considering that digital resources could help democratising cultural access (provided the population has access to digital infrastructure). Digital means could also support cultural institutions wishing to enlarge their audience base.

It is suggested that the European institutions:

- Regularly gather data on attendance on a sample of major European museums and heritage sites across the European Union, from NSIs or museums/heritage sites themselves (the list would be determined by the EC in consultation with the Council and the European Parliament);
- Engage with relevant organisations in Europe to measure cultural participation in the field of performing arts (e.g. European Festival Association (EFA), Culture Action Europe (CAE); International Network for Contemporary Performing Arts (IETM); Creative Europe projects, etc.);
- Make use of social media and Internet data (e.g. search trends data on Google) to monitor new forms of engagement in cultural activities within the limits of confidentiality and data protection rules (i.e. appropriate analysis requires socio-demographic data on users, which may threaten privacy);
- Build capacities amongst alternative data providers, and more particularly amongst the beneficiaries of the Creative Europe programme (i.e. cultural and creative organisations, cultural sites, etc.), to collect more and better data on cultural participation with a view to fulfilling Creative Europe's indicators requirements.

2.2. Data to measure cultural diversity

The promotion of cultural diversity is a fundamental objective of the EU. The EU is to '*respect its rich cultural and linguistic diversity, and [...] ensure that Europe's cultural heritage is safeguarded and enhanced*' (Article 3 TEU). Article 22 of the Charter of Fundamental Rights of the European Union lays down the requirement that '*the EU shall respect cultural, religious and linguistic diversity*'. The Treaty also states that the EU shall contribute to the flowering of the cultures of the Member States, while respecting their national and regional diversity, and shall bring the common cultural heritage to the fore (Article 167).

The EU is also the signatory of the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005). UNESCO has worked extensively on the concept of cultural diversity. However, no 'operational' definition allowing for its measurement has been provided. In the absence of an agreed definition and measurement model, it is suggested that the European institutions set mechanisms to:

- Agree on a common definition of diversity and list of key indicators through more research in the domain;
- Make use of Eurobarometer surveys to collect a minimum amount of regular data on diversity (e.g. European citizens watching films in their original language);
- Collect potentially retrievable data on produced diversity, distributed diversity and consumed diversity from alternative data sources (as highlighted in Chapter 2);
- Engage with private companies to obtain additional data on the topic (e.g. Nielsen and geographical distribution of music downloads but also Spotify or iTunes, for instance);
- Ultimately mandate an *ad hoc* institution (e.g. a CCS Observatory) to undertake the regular measurement of cultural diversity in Europe through the agreed indicators and make the most of existing data sources.

The following table summarises the proposed measures per objective and challenge addressed.

Table 11 – Proposed measures and challenges addressed

Objectives of the measures	Challenges addressed	Proposed measures	
		For the European institutions and relevant statistical bodies	For alternative data providers
Improve coverage of CCS in economic statistics	NACE codes poorly measure music, video games, fashion, and crafts	Propose revision of NACE classification[132]	Better engage with national institutions, foundations and trade associations to work out more and better statistical definitions with a view to addressing statistical gaps.
	Economic activity data are not available for museums, galleries and libraries, and performing arts from official European statistics (but SBS is currently being updated) and GVA is difficult to calculate for these sectors		Encourage NSIs as well as Eurostat to engage in dialogue with museums' and libraries' representatives to help gather more and better data on these sectors
			Commission the development of relevant methodologies to gather key economic data from major art festivals in Europe (film, music, performing arts), where existing (the list would be determined by the EC in consultation with the Council and the European Parliament)
	Micro-companies tend to escape from official statistics		Entrust a specialised research centre or *ad hoc* body to develop 'big data approaches' to better map the sector
Improve data on cultural employment	Designers and craftsmen are not well captured by ISCO codes	Propose revision of ISCO classification	
	No data on volunteers in CCS available from EU-LFS (out of EU-LFS' scope)		Gather data on volunteers in museums from EGMUS and help EGMUS adopt appropriate methods to attach a monetary value to their time as this would help better assess the GVA of the museum sector
Improve coverage of sales and usage patterns linked to digital delivery methods	Little coverage of new sales patterns and delivery methods		Engage with European trade and professional associations (including CS) and build capacity to get better quality data on new sales patterns and licensing trends
	No trade data on non-physical goods (e.g. e-books)		Engage with large companies and private data providers to obtain data on on-line purchases of EU cultural products (e.g. Amazon, Nielsen)
Develop datasets to address policy priorities – a)	Occasional data on cultural participation		Regularly gather data on attendance on a sample of major European museums and heritage sites across the European Union, from NSIs or museums/heritage sites themselves
			Engage with relevant organisations in Europe to measure

[132] As regards the revision processes of NACE and ISCO classifications, see also footnotes 129 and 131.

cultural participation			cultural participation in the field of performing arts (e.g. European Festival Association (EFA), Culture Action Europe (CAE); International Network for Contemporary Performing Arts in relation to performing arts (IETM); Creative-Europe projects, etc.)
			Make use of social media and Internet data (e.g. search trends data on Google) to monitor new forms of engagement in cultural activities within the limits of confidentiality and data protection rules
			Build capacities amongst alternative data providers, and more particularly amongst the beneficiaries of the Creative Europe programme (i.e. cultural and creative organisations, cultural sites, etc.), to collect more and better data on cultural participation with a view to fulfilling Creative Europe's indicators requirements
Develop datasets to address policy priorities – b) cultural diversity	Not covered by Eurostat's statistics		Agree on a common definition of diversity and list of key indicators through more research in the domain
			Make use of Eurobarometer surveys to collect a minimum amount of regular data on diversity (e.g. European citizens watching films in their original language)
			Collect potentially retrievable data on produced diversity, distributed diversity and consumed diversity from alternative data sources (as highlighted in Chapter 2)
			Engage with private companies to obtain additional data on the topic (e.g. Nielsen and geographical distribution of music downloads but also Spotify or iTunes, for instance)
			Ultimately mandate an *ad hoc* institution (e.g. a CCS Observatory) to regularly measure cultural diversity in Europe through the agreed indicators and make the most of existing data sources.

3. Possible scenarios

In this part different and viable scenarios are proposed in order to set up mechanism(s) to collect more and better quality CCS data at the European level. A scenario is intended as a plan of action aimed at improving the collection, analysis and delivery of CCS data.

Three scenarios are developed, each one with a different degree of ambition and articulation. Each scenario addresses a number of gaps, adding a level of 'improvement' each time:

- Scenario 1 addresses the sustainability of Eurostat's current work plan beyond 2018;
- Scenario 2 addresses capacity building with a view to enabling the usage of alternative data sources. This scenario proposes the setting up of a CCS virtual platform to collect data on a voluntary basis and the establishment of a Creative Leadership Board composed mainly of trade organisations to work with the European Commission on data collection related to identified policy themes;
- Scenario 3 proposes the setting up of a dedicated CCS Observatory to improve data collection and comparability from alternative data sources but also to make use of 'big data' for the development of new mapping methodologies.

The three scenarios are not exclusive and should be considered as three-steps of a process to improving statistics.

3.1. Scenario 1 – Ensure the sustainability of Eurostat's work programme on CCS' statistics

a) Objectives & scope

This scenario proposes to continue Eurostat's current work plan to improve CCS statistics (2014-2018) and ensure its sustainability beyond 2018. This scenario represents the 'minimum' effort scenario as it builds on Eurostat's expertise (rather than embarking on new data collection exercises, for instance).

The continuation of Eurostat's work on CCS statistics after 2018 should include the following (as a minimum):

- Yearly production and dissemination of updated statistics on employment (from EU-LFS), international trade in cultural goods (from Comext) and business (from SBS and STS) on the Eurostat online database (Eurobase) (based on the work carried out in 2015);

- Possible development of indicators to measure the impact of culture on the economy at EU level;

Based on the feasibility of the proposals elaborated to improve statistics on cultural practices and participation, private expenditure and public spending on culture, statistics could be regularly produced and disseminated in these areas, too.

Eurostat could also continue fostering inter-country collaboration for the development of appropriate methodologies for the production of comparable culture Satellite Accounts (SA) at national level (as currently done as part its work plan 2014-2018): this is important because, as confirmed by various experts consulted during this mission (see list under Resources – 1), SA represent a very good instrument to accurately estimate CCS' contribution to the economy. Indeed, various EU countries are in the process of setting one up, namely

Finland, Spain, Poland, Portugal and the Czech Republic (see footnote 14). In the long run, national efforts could lead to the development of a European SA for the CCS.

In order to make the most of available expertise and resources, it is worth recalling that the UNESCO Institute for Statistics (UIS) is interested in developing a global standard for culture satellite accounts. UIS has commissioned a study to examine the current status of these accounts at national level. It will be finalised in September 2015[133]. Eurostat and UIS should join forces to make progress in this area.

b) Advantages & disadvantages

Advantages:

- Ensures the funding of existing activities and their sustainability;
- Guarantees the yearly production and dissemination of European official statistics on key social and economic aspects of CCS (namely: employment, business, and international trade in cultural goods, as a minimum);
- Ensures the best geographical coverage and quality standards for CCS statistics, as Eurostat covers all Member States and all its statistics are obliged to follow the provisions of the Quality Assurance Framework of the European Statistical System;
- Serves the development of more complex statistical instruments guiding policy making, notably the 'Cultural and Creative City Index' currently developed by the European Commission's Joint Research Centre (see Box 8).

Disadvantages:

- More or less enacts a *status quo* which is unsatisfactory considering 'structural weaknesses' of the current statistical system as identified in the mapping;
- It does not fully take into account the data potentially retrievable from the market (apart from administrative sources which are already explored as part of Eurostat's current work plan on CCS statistics).

Box 8 – A 'Cultural and Creative City Index' to monitor cultural and creativity cities

The Joint Research Centre (JRC) has set out to develop an evaluation tool to '*monitor cultural and creative initiatives at city level in Europe – as well as with respect to international global cities – and to assess the impact of specific culture-oriented initiatives on cities' economic and social development*' (JRC, 2015). The project arises from the need to develop a common evidence base to better understand and monitor cultural and creative initiatives. Existing indicators indeed suffer from issues concerning coverage, breadth, and comparability.

The objective is to create a 'Cultural and Creative City Index' (provisional name) which would support research and policy advocacy, both at the European and city level. The Index would cover the CCS as defined by the Creative Europe programme, but also take into account emerging creative initiatives such as fab labs. The 'local' focus is explained by the increasingly important role that cities play in attracting creative talents and activities as a major source of innovation and growth.

The Index will be built in cooperation with various stakeholders and experts (including policy makers, research centres, etc.), to make sure that different needs and expectations are taken into account, while

[133] Source: interview with Mr. José Pessoa, Head of Culture Statistics - UNESCO Institute for Statistics (7 April 2015).

ensuring the conceptual and statistical soundness of this new tool. An extensive set of databases has been identified to collect the most appropriate data, including both publicly available datasets (e.g. from Eurostat) and private ones (such as Amadeus) as an additional source of information. The Index is planned to be launched officially in 2016.

3.2. Scenario 2 – Capacity building, a CCS Virtual Platform and a Creative Leadership Board

a) Objectives & scope

The priority addressed by this scenario is the need to increase data availability and build capacity to collect quality and comparable data with a view to building a more comprehensive and sound evidence basis to inform policy making.

Its objectives would be to:

- Use official statistics and statistical standards as a benchmark for industry and other sectoral data;
- Build new statistical skills and procedures, inspired by the Quality Assurance Framework of the European Statistical System;
- Build a collaborative approach between the industry and public authorities to construct a strong evidence base framework;
- Ensure data evolve towards standards;
- Train industry bodies in collection methodologies to enable comparisons across the European Union.

b) Organisational framework

This scenario involves the creation of a CCS Virtual Platform, a Creative Leadership Board and a capacity building programme.

A European CCS Virtual Platform

The setting up of a 'European CCS Virtual Platform' (online) has the objective of collecting and delivering/disseminating existing data on the CCS from a large number of sources. The task of such a virtual platform would also be to gather these data, currently 'dispersed' across different sources, into a single entry point. Priority would be given to European official statistics (when available) whilst other sources are suggested to address data gaps in relation to identified policy themes, for instance, cultural participation and cultural diversity.

The mapping has identified a wide variety of available data on cultural and creative activities – ranging from Eurostat to professional associations (publishing, architecture, video games, music), Collecting Societies, private companies, public institutions (cultural ministries or museums), social media, business registers and Cultural Observatories – which can help address partially or wholly the existing gaps.

Even if alternative sources do not comply with international statistical standards nor with international quality frameworks, they would be gathered to serve as a basis for future harmonisation, to collect evidence (even if partial) and complement existing data from established statistical bodies, by gathering 'market intelligence' to better understand the business potential and needs of CCS in the short or medium term, or by covering areas not treated by European statistics (e.g. cultural diversity).

The data would be made available by sectoral and industrial bodies on a voluntary basis. Data would be collected through a survey that would be limited to data already collected from these bodies (as identified in the mapping) to help formulate or monitor public policies in defined priority areas.

The identification of thematic data collection is important in order to limit the scope of data collection activities and enable qualitative management of the process with a reduced number of actors. It could be a way of accelerating the availability of data since industry sectors would be interested in contributing to the implementation of policy priorities or complete data sets to show the economic contribution of their sector.

The alternative data providers that would like to contribute to this exercise could be selected through an open call/call for expressions of interest that would invite sectoral bodies, Collecting Societies and Cultural Observatories to express their willingness to provide data on identified policy priority areas. All the organisations identified in the mapping could represent a preliminary list of invitees but the call could actually be open to any 'alternative body' collecting data on the sector and wishing to contribute to such an exercise (including major European festivals, foundations, etc.).

We should like to illustrate how a policy-based data collection framework could work according to identified policy themes such as:

- Data to assess CCS' contribution to the economy and innovation;
- Data to monitor cultural participation;
- Data to measure cultural diversity.

For each priority, it is strongly suggested to proceed step by step. First, it would be necessary to agree on common definitions, when necessary, notably as regards cultural participation and cultural diversity. Secondly, concerned parties should agree on a minimum number of key data to be regularly collected. Thirdly, data collection should be arranged to give priority to 'readily available' data, and based on a thorough assessment of quality and comparability issues.

As regards the **contribution to the economy and innovation**, the following data could, for instance, be collected:

- Key official economic statistics from Eurostat, namely: number of companies, turnover, GVA and employment, value of trade of cultural goods and market share, and innovation in CCS (e.g. in terms of new products, services etc. produced or sold);

- Economic data from alternative data providers when readily available, such as:

    - Number of architects working in Europe, turnover from different kinds of architectural practices, export earnings, etc. from ACE;

    - Socio-economic data on museums and libraries (e.g. staff, volunteers, financial data, etc.) from EGMUS and EBLIDA;

    - Rights licensing and digital sales and revenues on music and book publishing from national and international professional or trade associations;

    - Key economic indicators (e.g. GVA, employees, turnover) from major festival organisations;

    - Data from the fashion, design, craft and the video game industries (including eSports games) stemming from studies carried out at international, European or national level by industry

organisations or public institutions (see examples of studies mentioned in Chapter 2 infra-section 2.3).

In relation to **cultural participation**, the following data could be gathered (subject to the adoption of a common definition):

- Rates of participation in cultural activities from EU-wide surveys, notably EU-SILC (next EU-SILC data will be available in 2017-2018) and Eurobarometer surveys;
- Data on cultural participation from alternative data providers, such as:
    - Number of total visits to European museums from EGMUS (or national ministries, at least for a sample of museums in Europe);
    - Accessibility to digitised heritage collections (estimated percentage of all the digital objects that are and/or will be accessible online and offline in European cultural heritage institutions);
    - 'Likes' and 'followers' for the top 20 European museums and galleries from Facebook and Twitter as an indicator of success of cultural institutions in engaging their audiences through social media, or visits to the Google Art Project;
    - Search trends of culture-relevant 'words' from Google Search Trends, as shown in the mapping e.g. for Fibre and Textile Art but which could be extended to others such as 'museums', 'arts' or 'galleries' as an indicator of interest in museums;
    - Numbers of visitors to major national or international festivals or artistic events as collected by national platforms (e.g. Finland, Hungary, as shown in the mapping) or to be collected on a sample of festival organisers in Europe;
    - Number of registered readers from sectoral organisations (such as EBLIDA) or national ministries and libraries in Europe;
    - Video games consumption habits from ISFE.

As for **cultural diversity**, it is proposed to focus data collection on the following (again subject to the adoption of a common definition):

- International trade in cultural goods, including the market share of European culture and creative goods in main third markets such as North America, China or Brazil, for instance, from Eurostat (Comext);
- Data measuring diversity across its different dimensions, such as: number of titles and genres published from FEP (produced diversity) or top selling global albums and singles from IFPI including downloads and streaming (Digital Music Report) (consumed diversity);
- Engagement with private data holders to provide relevant data on cultural diversity which are not accessible for free, such as:
    - Share of repertoire (local/other EU/other repertoire) in physical sales, airtime and downloads; share of local language in physical sales, airtime and downloads of local repertoire streamed on online music platforms from Nielsen;

- Market share of repertoire (local/other EU/ non EU) in music streaming platforms such as Deezer or Spotify;
- Book translations made available and sold in European and third countries from FEP and major European publishers.

Finally, the virtual platform could also gather data collected/studies carried out by Creative Europe funded projects as an additional source of information on CCS in Europe. For instance, data from EJN (employment, turnover, GVA, number of admissions, etc.) could be integrated across different policy dimensions (contribution to the economy, and cultural participation) (e.g. see Box 4 – European Jazz Network).

The following figure illustrates the logic of the CCS Virtual Platform.

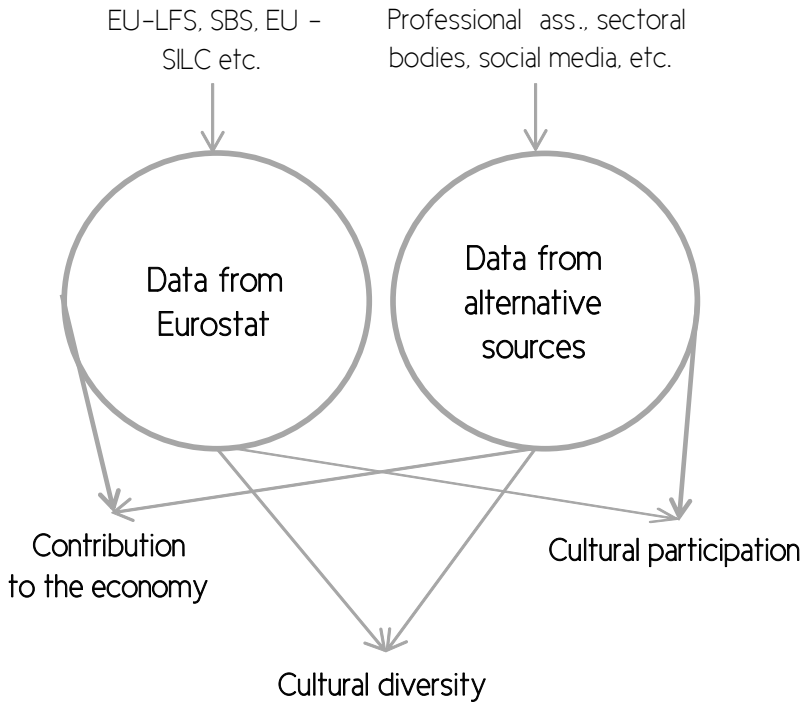


Figure 5 – CCS Virtual platform: possible policy themes and data sources

The setting up of the Virtual Platform is inspired by the scheme developed by DG TRADE of the European Commission to collect information on the protection and enforcement of Intellectual Property Rights (IPRs) in third countries through the use of bi-annual surveys[134]. This mechanism of data collection relies on voluntary participation from mainly private stakeholders (including rights holders and industry associations) who are sent a Word-format questionnaire by email (also available on DG TRADE's website during the survey period).
The initiative, which was initially managed (2006) by DG TRADE with limited human and financial resources (one policy officer on a part-time basis), led to the setting up of the EU Observatory on Infringement of IPR in 2012 (as also referred to in Scenario 3). The Observatory carries out these surveys and other studies to provide regular evidence-based contributions and data to inform more effective IP enforcement policies that

[134] http://ec.europa.eu/trade/policy/accessing-markets/intellectual-property/enforcement/

support innovation and creativity. Based on the results of the survey, DG TRADE regularly compiles policy reports on IPR protection and enforcement outside the EU[135].

The Creative Leadership Board

For the Virtual Platform to be operational, the involvement of bodies collecting alternative data sources will be crucial. Therefore, it is proposed to set up a 'Creative Leadership Board'.

The Creative Leadership Board would operate as a consultative structure responsible for supporting data collection according to relevant policy needs. It would gather representatives of alternative data sources identified as capable of providing useful data. The composition would vary according to data collection needs to ensure that the board structure remains manageable.

The Board would act as an incentive to encourage the private sector and public institutions to participate in the CCS Virtual Platform, as it would give alternative data sources a say on the ways in which statistics relevant to their activities are being collected and used for advocacy purposes.

This Board would interact with the European Commission (at least DG EAC, the JRC and Eurostat) to consider ways of filling data gaps and addressing statistically policy priorities. This interface, proposing regular consultations, would consider ways of improving data collection and their usability, which will form the basis for the development of the capacity building programme (see next section).

A similar board exists in the context of the functioning of the European Observatory on Infringements of IPR: the Observatory network is composed of public- and private-sector representatives, who collaborate in active working groups (one of which focuses on statistics and data collection). Synergies may be found with these associated organisations as IP industries in the copyright and trademark field are part of the cultural and creative sectors[136].

Capacity building programme

Capacity building is intended as a process which requires medium to long-term assistance (e.g. technical assistance, training) to improve skills and processes. The capacity building scheme proposed in this Scenario would help alternative data providers improve their data collection skills to supply the CCS Platform with better quality data.

Due to the different nature of organisations that may need assistance (private or public, sectoral or cross sectoral, temporary or permanent, etc.), we propose setting up a scheme addressing the capacity building needs of different groups, in particular:

- Non-profit and public sectoral organisations such as EGMUS and EBLIDA to help them set up more rigorous statistical procedures in order to continue collecting data on museums and libraries but in a more consistent and accurate way. Support to these organisations would build on the cooperation that is currently being established between EGMUS and Eurostat (see footnote 130);

- Private professional and trade associations to help them develop and adopt common methodologies and standards to ensure better coverage and comparability of data;

[135] See, for instance, the latest one available (European Commission, 2015) at: http://trade.ec.europa.eu/doclib/docs/2015/july/tradoc_153600.pdf

[136] Many of the professional associations mentioned in the mapping are indeed members of the Observatory's network (see: https://oami.europa.eu/ohimportal/en/web/observatory/observatory-network#private).

In addition, the capacity building programme could offer statistical support to other organisations upon request, for instance, Cultural Observatories, performing arts organisations, European networks (e.g. European Festival Association – EFA) but also Creative Europe-supported projects to help them implement data collection activities and fulfil Creative Europe's indicators requirements (art. 18).

Two experiences may be particularly relevant to help the European Commission shape the proposed capacity building scheme. The first, at national level, regards the good standards of evidence developed by the UK Intellectual Property Office (IPO) to ensure that better quality data on copyright infringements are collected by the industry (IPO, 2013)[137]. The second, at European level, concerns the scientific expertise and methodological support provided by the Centre for Research and Impact Evaluation (CRIE) of the European Commission (JRC) to the Directorate General Employment, Social Affairs and Inclusion (DG EMPL) and Member States.

Box 9 – Capacity building for better data collection and analysis by CRIE

The Centre for Research and Impact Evaluation (CRIE) supports the Directorate General Employment, Social Affairs and Inclusion (DG EMPL) and Member States for the impact evaluations of interventions funded by instruments managed by DG EMPL, namely the European Social Fund.

In particular, CRIE helps Member States acquire the necessary skills and procedures to perform Counterfactual Impact Evaluation (CIE)[138] by organising training sessions on survey design, impact evaluation methods, labour economics, etc., by providing tailor-made advice on methodological and data issues as well as by carrying out quantitative analyses for CIE.

In addition, the scheme could be inspired by the other good practice examples of data collection and quality improvement identified thorough the report (see Box 1 – Destatis' project to get more and better CCS data from Cultural Observatories (Germany), Box 3 – UK Music: matching industry data and official statistics to better measure GVA in the music sector; Box 4 – European Jazz Network; Box 5 – NESTA: a big data approach to measure the video games sector; Box 6 – Festival statistics: the methodologies developed in Finland and Hungary).

c) Advantages and disadvantages

Advantages:

- Collect more data, relevant to market evolution, as detailed business statistics are outside the scope of official statistics;
- Raise awareness amongst industry players on the importance of collecting data and get industry to participate in data collection and data sharing;
- Address existing data gaps in the medium term;
- Start a bottom-up process of harmonisation linked to market development and policy formulation needs.

[137] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388238/consult-2011-copyright-evidence.pdf

[138] "In its simplest form, counterfactual impact evaluation (CIE) is a method of comparison which involves comparing the outcomes of interest of those having benefited from a policy or programme (the 'treated group') with those of a group similar in all respects to the treatment group (the 'comparison/control group'), the only difference being that the comparison/control group has not been exposed to the policy or programme. The comparison group provides information on 'what would have happened to the members subject to the intervention had they not been exposed to it", the counterfactual case'. Source: European Commission (https://ec.europa.eu/jrc/en/research-topic/counterfactual-impact-evaluation).

Disadvantages:

- Data will not necessarily be comparable across the EU (due to the use of different data sources and data collection methodologies), at least in the short term;
- Data collection will be limited geographically and in its scope (based on data availability from the identified alternative data providers), at least in the short term;
- Data will not fulfil the Quality Assurance Framework of the European Statistical System or other quality standards (at least in the initial stage) and other more applicable standards may need to be defined;
- The scenario may take several years (from 3 to 5 as a minimum) to be fully implemented (going from the identification of alternative data providers to the production of better quality data as a result of the capacity building scheme), considering the variety of data collected by alternative data providers and different capacity building needs;
- Private stakeholders may not be willing to engage and devote resources unless they see an interest (such interest could be influencing policy through evidence-based advocacy);
- Eurostat's ability to provide capacity building expertise is limited due to financial but also regulatory constraints.

3.3. Scenario 3 – A CCS Observatory

a) Objectives & scope

This scenario is about the establishment of a CCS Observatory with the mission to collect and deliver information on the CCS in Europe, as defined by ESSnet and Creative Europe (excluding the audiovisual sector). The Observatory could draw inspiration from the setting up of the EAO in 1992 following the Resolution (92) 70 of the Committee of Ministers of the Council of Europe. The launch of the EAO coincided with the adoption of the Media programme and the Directive 'Television without Frontiers' at EU level (Council of the EU, 1989), regulatory instruments aimed at supporting the development of the European audiovisual sector, considered as strategic. Similarly the CCS Observatory would accompany the adoption of policy instruments aimed at reinforcing Europe's creative economy.

This scenario is also inspired by the EU Observatory on Infringement of intellectual property rights (IPR) established in 2009 and managed by the Office for the Harmonisation of the Internal Market (OHIM)[139] in 2012 (European Parliament & Council of the EU, 2012). It consists of a network of experts and specialist stakeholders including representatives of both the public and the private sectors as well as international observers such as the OECD, Europol, Eurojust, WIPO and Interpol. The Observatory undertakes important data collection and analysis actions in the field of IP enforcement. Its budget is around € 3 million a year. It represents a key resource to policy makers in understanding IPR issues.

The system of European Observatories has become an important part of the European statistical 'scene'. Their independence has allowed them to take a broad interpretation of a variety of statistics and policy instruments and should be encouraged. They have provided a valuable 'alternative' voice by enabling better data collection and interpretation, for instance, by doing more in-depth data collection and analysis on a specific sector, by covering sectors/topics which are not necessarily covered by official statistical but are politically relevant, or by providing expert insights on official statistics.

[139] The Office for the Harmonisation of the Internal Market (OHIM) is an agency of the European Union, based in Alicante: https://oami.europa.eu/ohimportal/en/

This is also the experience of the Cultural Observatories analysed in this report[140]:

- EAO has provided European policy makers and professionals in the sector with an unparalleled amount of good quality data which go beyond what is available in official statistics. In addition, by analysing in-depth the Amadeus database, EAO was able to re-index several companies, thus quantifying the audiovisual market in a much more accurate way;

- The Budapest Observatory regularly comments on published statistics putting them in context and commenting on different estimates based on the use of different methodologies. At national level, it has contributed to setting up an *ad hoc* tool (a national festival registry) which helps keep track of festivals in Europe (in relation to a minimum amount of data on employment, finance, etc.);

- The Council of Europe's Compendium – relying on a network of national experts throughout Europe – does a unique job in terms of data gathering and analysis on cultural policies in the EU and beyond. It also plays an important role in making data available from official statistics (e.g. Eurostat, OECD) in a user-friendly form (e.g. through comparative tables gathering data on different countries across time);

- EGMUS has developed a unique platform in Europe gathering key data on museums.

Based on these observations, the creation of a CCS Observatory would provide an effective mechanism to capture more and better quality data and analysis on CCS, on a long term basis.

More particularly, the CCS Observatory would be responsible for:

- Providing statistical information on CCS (excluding the audiovisual sector) as a complement to the work already carried out by Eurostat and the EAO;
- Improving collection and comparability of data from alternative data providers;
- Developing 'big data' methods to measure the creative economy, by engaging with relevant stakeholders in the public and private sectors

It is proposed that the Observatory offer the following services (as further detailed in the table below):

(a) collect and disseminate statistics on:

  - museums and libraries in cooperation with EGMUS and EBLIDA;
  - music and video games in cooperation with EAO, based on a 'big data' approach to be appropriately developed;
  - crafts and fashion industries based on *ad hoc* methodologies and tools to be developed in cooperation with the industry/national associations/national ministries/design and craft centres;
  - a sample of representative European festivals and artistic events with international significance;
  - cultural participation.

(b) run a capacity building scheme for alternative data providers, building on identified good practices (as detailed in Scenario 2);

[140] We remind you that for the objectives of this study, the term « Cultural Observatories » covers a wide range of different organisations (different in structure, temporal and geographical scope, etc.) but all engaged in data collection activities in the field of CCS.

(c) develop agreed methodologies and standards to measure cultural participation data from the Internet in a comparable way (e.g. Twitter, Likes, Search Trends on Google);

(d) commission *ad hoc* studies on the request of the European institutions or Member States on policy-relevant issues (e.g. impact assessment studies, evaluations, in-depth sectoral studies, forecast analyses);

(e) design indicators to address policy needs and measure policy[141];

(f) disseminate data on a user-friendly platform for public users;

(g) prepare regular e-bulletins and an annual publication analysing data collected to disseminate information on the European CCS sector.

In relation to point (a), it is proposed to develop a 'mixed' model of data collection in order to make the most of both internal and external resources. Data collection would, therefore, be:

- 'Centralised', as regards data collection from alternative data sources and capacity building actions;
- 'Decentralised'/'Outsourced', for sector-specific data collection and *ad hoc* studies to be commissioned to external experts.

Table 11 – CCS Observatory: data collection strategy per sector

Cultural and creative sectors/dimension	Strategy & Model	Relevant policy priorities
	Decentralised model	
Museums (at least n. of museums, types of collections, n. of visitors, staff, volunteers, and possibly GVA)	Support EGMUS to collect better and more comparable data on museums in all EU28 countries at least every 2 years	Contribution to the economy Cultural diversity Cultural participation
Libraries (at least n. of libraries, staff, n. of visits, e-resources, and possibly GVA)	Support EBLIDA to collect data on libraries in all EU28 countries at least every 2 years	Contribution to the economy Cultural participation
Music (at least employment, turnover, revenues from different services/licenses rights, GVA as well as n. and types of genres produced, distributed and consumed)	Cooperate with EAO to collect better and more comparable data on music in cooperation with the music industry and Collecting Societies, exploring possible 'big data' approaches	Contribution to the economy Cultural diversity Cultural participation
Video Games (at least employment, turnover, GVA and n. of titles produced, distributed and consumed)	Cooperate with EAO to collect better and more comparable data on video games, exploring possible 'big data' approaches	Contribution to the economy Cultural participation
Cultural participation	Collect cultural participation data on a sample of major European museums, heritage sites and performing arts institutions in collaboration with relevant institutions and organisations in Europe (e.g. NSIs, museums/heritage sites/performing arts institutions themselves and European associations such as European Festival Association (EFA), Cultural Action Europe	

[141] See, for instance, Appendix 5 for a more detailed proposal related to the development of a Cultural Participation Index.

	(CAE), International Network for Contemporary Performing Arts in relation to performing arts (IETM), etc.)	
	Centralised model	
Fashion (at least employment, turnover and GVA)	Develop appropriate methodologies and data collection tools (in cooperation with the industry and sectoral associations) to regularly measure the fashion industry in Europe	Contribution to the economy
Crafts (at least employment, turnover and GVA)	Develop appropriate methodologies and data collection tools (in cooperation with the industry and sectoral associations) to regularly measure the crafts industry in Europe	Contribution to the economy
Festivals (at least employment, volunteers, turnover, GVA, and audiences)	Set up appropriate methodologies and data collection tools to regularly collect economic and social data from a sample of festivals in Europe, inspired by work carried out in Finland and Hungary (see Box 6 – Festival statistics: the methodologies developed in Finland and Hungary)	Contribution to the economy Cultural participation
+ capacity building actions + ad hoc studies		

b) Organisational framework

Initially the Observatory could be administered by DG EAC and its executive Agency EACEA or jointly under a public-private partnership (PPP), financed both by a Commission grant/programme and private sector stakeholders[142]. The PPP option could be a good solution to ensure active engagement of the private sector in this exercise but their interests may not necessarily correspond to those pursued by European policy makers.

It is also suggested to associate in an advisory capacity:

- A Creative Leadership Board gathering professional and sectoral associations would work as an 'incentive' for the industry to engage in data provision and improvement (as in previous Scenario).
- CCS' experts and/or representative of Cultural Observatories (including EAO), and research centres such as the JRC, to provide an interpretative framework to analyse data, contribute to the development of *ad hoc* studies as well as assist in the development of policy relevant indicators.
- A pool of experts to be set up through on an open call for expressions of interest which would gather experts/research centres specialising in the main policy themes of interest (e.g. diversity) or sectors where there is an important lack of data, notably crafts, fashion, video games and performing arts as well as 'big data'/social media.

[142] See for instance the different management options that have been studied for the setting up of the OHIM Observatory and related advantages and disadvantages in European Commission (2011): http://ec.europa.eu/internal_market/iprenforcement/docs/observatory/sec_2011_0613_en.pdf

c) Advantages & disadvantages

Advantages:

- Creation of a dedicated infrastructure having the objective of collecting CCS statistics on a permanent basis;
- Maximising the use of data available in the market, from various sources;
- Development of innovative approaches to measure CCS, beyond the limits of official statistics;
- Potential to leverage private sector funding by directly involving the private sector in the governance of the Observatory, associating foundations, public institutions or rights management bodies;
- Existing observatories, notably EAO[143], offer inspiring examples notably as regards the organisational structure and funding arrangements;
- Such a structure can work alongside Eurostat and complement Eurostat's activities, as shown by the EAO example.

Disadvantages:

- A long term process is likely to be needed as the adoption of a legal basis is required (2 to 3 years, at least);
- Significant financial commitment is required from the EU as in the pilot phase (over 3 years) it would cost a minimum of € 2 million / year as suggested by the EAO[144] and OHIM experiences (European Commission, 2011[145]);
- Member States may not want to contribute to such a structure, depending on political priorities.
- Alternative data providers (especially private companies) would have to be convinced to contribute to data collection;
- Appropriate engagement mechanisms may take time to be operational considering the diversity of sectors covered.

With a view to limiting costs, possible solutions could be to:

- Focus data collection on policy relevant themes that can motivate alternative data providers to engage as they will see the policy significance of the project;
- Allow commercial partners to maintain ownership and confidentiality of their data while making it available to the public in an anonymous and aggregated form (i.e. some data are publicly available – e.g. Facebook likes – but others such as sales data are not);
- Instead of setting up a new Observatory, the mandate of existing structures (EAO, JRC[146]) could be enlarged to include specific missions.

[143] Today, EAO numbers a team of 23 professionals and a yearly budget of about € 3.2 million, including funding from 41 members (40 state parties and the European Union) and revenues from commercial activities (e.g. sales of studies – around 35 per cent -40 per cent of the annual budget) (Source: questionnaire and interview with EAO as part of the benchmarking of Cultural Observatories).

[144] See Resolution (92) 70 of the Committee of Ministers of the Council of Europe, 15 December 1992.

[145] Various budgetary proposals are examined in the impact assessment study carried out before the establishment of the Observatory: http://ec.europa.eu/internal_market/iprenforcement/docs/observatory/sec_2011_0613_en.pdf

[146] For instance, EAO could be well placed to conduct research on video games (similarly, the mandate of the CNC in France and British Film Institute has recently been enlarged to include video games); while the European Commission's research centre JRC-IPTS could have the right competences to explore 'big data' approaches as they have developed considerable expertise in the field of CCS, Internet and new technologies in the last few years.

RESOURCES

1. Consulted experts

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APPENDIX

1. List of abbreviations

ACE	Architectural Council for Europe
ABS	Annual Business Survey
AES	Adult Education Survey
BACH	Bank for the Accounts of Companies Harmonized
BO	Budapest Observatory
CS	Collecting Societies
CCS	Cultural and Creative Sectors
CIS	Community Innovation Survey
COICOP	Classification of Individual Consumption according to Purpose
CAE	Culture Action Europe
EAO	European Audiovisual Observatory
EBLIDA	European Bureau of Library Information and Documentation Associations
EBOPS	Extended Balance of Payments Services
EFA	European Festival Association
EGDF	European Game Developer Federation
EGMUS	European Group on Museum Statistics
EVS	European Values Study
FEET	Finnish Event Evaluation Tool
FEP	Federation of European Publishers
GVA	Gross Value Added
IAB	Institut für Arbeitsmarkt- und Berufsforschung
ICET	Information, communication and community, enjoyment and expression, transaction
ICT	Information and Communications Technology
IDBR	Inter-Departmental Business Register
IETM	Network for Contemporary Performing Arts in relation to performing arts
IFLA	International Federation of Library Associations and Institutions
IFPI	International Federation of the Phonographic Industry
ISCO	International Standard Classification of Occupation
ISFE	Interaction Software Federation of Europe
ISIC	International Standard Industrial Classification
ISO	International Organization for Standardization
JRC	Joint Research Centre
LFS	Labour Force Survey
NACE	Statistical classification of economic activities in the European Community
NSI	National Statistical Institute
OECD	Organisation for Economic Cooperation and Development
SBS	Structural Business Survey
SGAE	Sociedad General De Autores y Editores
SIC	Standard Industrial Classification
SILC	Statistics on Income and Living Conditions
TAFA	Textile And Fiber Art
TCR	Trends Central Resource
TUS	Time Use Survey
UCP	Unorganised Content Providers
UIS	Unesco Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
VML	Virtual Microdata Lab
WAN-IFRA	World Association of Newspapers and News Publishers

2. Questionnaire sent to Cultural Observatories

Survey for Cultural Observatories

As part of the "Feasibility study on data collection and analysis in the cultural and creative sectors in the EU" currently prepared by KEA for the European Commission

KEA European Affairs, a Brussels-based research and advisory company specialised in the field of culture and creative sectors (CCS), has been entrusted by the European Commission to carry out a feasibility study to help the European institutions collect more and better quality data on CCS in Europe. The purpose of the following survey is to better understand the characteristics and the main activities carried out by Cultural Observatories as regards data collection activities with a view to understand in which way these organisations could contribute to the setting up of European mechanisms to collect CCS' data.

This questionnaire should be filled in by the person in charge of data collection.

Thanks in advance for your time.

Part I – General Information

Date:_____ Year of foundation:_____

Name of your organisation:_____

Type of organisation:

- ☐ Non-profit
- ☐ Private
- ☐ Public
- ☐ Other – please specify:

Legal status:

- ☐ Cooperative
- ☐ Foundation
- ☐ Governmental agency
- ☐ Association
- ☐ Other – please specify:

Name of the subdivision(s) in charge of the data and metadata:_____

Name of the contact points/persons in charge of the data and metadata:_____

Area of technical responsibility of the contact(s), such as "methodology", "database management"

or "dissemination":_____

Contact(s) email address and phone number:_____

Please describe your organisational structure by completing the following tables:

	Number of people:	Please provide the names of governmental/institutional members, if any (European Commission Member
Decision-making body (Board, Executive Council…)		
Advisory body		

	Number of people:	Covered positions (directors, analysts, assistants, etc.)
Management staff		
Research team	Regular employees: Freelancers:	
Other (e.g. administrative, communication staff, etc…)		

Please describe the areas of expertise covered by your research team (possibly per each member of the team)

_____
_____
_____
_____

Is your organisation part of/linked to a public institution? If so, which one?

_____
_____

Geographic coverage of actions:

- ☐ Local/regional
- ☐ National (one country)
- ☐ National (several countries)
- ☐ EU-28
- ☐ International (beyond the EU-28)

If local/regional, national (one or more countries), or international, please specify the exact coverage:
_____
_____

Please indicate the yearly budget of your organisation: _____

Please indicate the percentage of funding you received from each source for the last complete financial year:

- [ ] % Public
- [ ] ‰ Private (donations, sponsors, …)
- [ ] ‰ Commercial activities/ own revenues
- [ ] ‰ Other, specify: _____

If your organisation receives any EU or international funding (subsidies/grants), can you please specify the source? (E.g. European programmes such as Creative Europe, COSME, Horizon 2020; funds such as ERDF, ESF; funding from institutions such as the Council of Europe, etc.).

_____
_____

Part II – Activities, services and products

Which of the following activities/services does your organisation carry out/provide?

- [ ] Research – more particularly:
  - [ ] Data collection
  - [ ] Data analysis
  - [ ] Policy analysis
  - [ ] Other – please specify:_____
- [ ] Active dissemination of research findings (through web platforms, reports, conferences, debate, etc.)
- [ ] Education & training – Please specify if you offer any education & training services related to data collection:
  _____
- [ ] Other – please specify:_____

What kind of products (other than datasets)/services does your organisation deliver in relation to the data collected? (Studies, reports, fact sheets, etc.). Please also indicate format and modalities of dissemination (print and electronic), and accessibility conditions (available for free, against the payment of a fee, etc.)

_____
_____
_____
_____

Part III – Focus on data collection activities

For each dataset, please provide the following key information:

Dataset 1	Name/reference of the dataset
Short description	Describe the main characteristics of the dataset in an easily understandable manner, referring to the main data and variables or indicators disseminated. This short description should be understood immediately and easily by the users.
Sector coverage	List the cultural and creative sectors covered by the dataset produced.
Purpose	Explain the purpose of collecting data contained in this dataset (research, advocacy, policy making, etc.).
Partnerships established	Please indicate whether you have established any partnerships (and if so, with whom) to obtain these data.
Source of data	*See below list of possible answers
Data collection technique[147]	*See below list of possible answers
Data collection and validation process	Please provide a short description and in particular explain: which actors are involved in the process, who is responsible for overseeing and implementing the process, whether it is a centralised or decentralised process (e.g. through national coordinators), how data are checked and validated or 'adjusted' upon receipt (such as through seasonal; adjustment methods, time series decomposition, or other similar methods).
Conformity of the dataset to international standards	*See below list of possible answers

*List of possible answers

Source of data:	Data collection technique:	Standards:
Administrative data collected by other organisations	Emailed survey	ESMS European SDMX Metadata Structure
Sample-based data collected by other organisations	Postal survey Online survey	SDMX Statistical Data and Metadata Exchange
Census data collected by other organisations	Face-to-face interviews	NACE Classification for economic sectors
Administrative data collected by your organisations	Computer assisted personal interviews (CAPI)	ISCO International Standard Classification of Occupations
Sample-based data collected by your organisations	Computer assisted telephone interviews (CATI)	

[147] If your dataset include secondary data, please explain how these data were first collected by the original data holder and then by your organisation.

Census data collected by your organisations Other, specify :_____	Focus groups Direct personal observation Other, specify :_____	

Additionally, for each dataset, please fill in the following table referring to more specific methodological features. If necessary, refer to the Annex for detailed explanation of each item (sector coverage, statistical population…).

Dataset 1	Name/reference of the dataset
Statistical population	
Statistical unit (enterprise, individual, household…)	
Sampling design (in case of sample-based data)	
Reference area	
Time coverage	
Frequency of dissemination	
Dissemination format	
Overall accuracy	
Time lag (number of days from reference period to publication of first results)	
Comparability – geographical	
Comparability – over time	
Frequency of data collection	

Please add and complete as many tables as necessary according to the number of datasets compiled in your organisation (database 3, 4, 5, 6…).

Could you please try to give a rough estimation of the cost associated with the production of datasets or other statistical products that you may produce? It may consist of staff costs, data collection costs and other costs related to reporting obligations, if any. For each figure you provide, please specify to which statistical product it refers to and which cost items you have included to obtain this figure.

_____
_____
_____
_____

If you have an online database(s) can you please say how many 'hits' this took a) in the last month, b) in the last year:

_____
_____
_____
_____

Can you describe your policy regarding access to the data on the online database/s taking into account the needs for confidentiality versus the desirability for public access:

_____
_____
_____
_____

Other comments:

_____
_____

Thank you very much for taking the time to complete this survey. Your contribution is very much appreciated!

ANNEX:

Statistical population	Describe the target statistical population (one or more) which the dataset refers to, i.e. the population about which information is to be sought.
Statistical unit (enterprise, individual, household…)	List the basic units of statistical observation for which data are provided. These observation units (e.g. the enterprise, the local unit, private households…) can be different from the reporting units used in the underlying statistical surveys.
Sampling design (in case of sample-based data)	Describe the sampling design used to collect the data included in your dataset (Simple Random Sampling, Systematic Sampling, Stratified Sampling, etc.)
Reference area	At European level: the geographical area covered by the dataset (e.g. EU Members states, EU regions, USA, Japan, etc. as well as aggregates such as EU-28, EEA). At national level: the country, the regions and aggregates covered by the dataset disseminated.
Time coverage	The time periods covered by the data set should be described (i.e. the length of time for which data set is disseminated, e.g. from 1985 to 2006 for certain annual data).
Frequency of dissemination	It should be stated the frequency with which the data is disseminated (e.g.

	monthly, quarterly, yearly). The frequency can also be expressed by using the codes released in the harmonised code list available for the European Statistical System.
Dissemination format	The various means of dissemination used for making the dataset available to users should be described (including the various dissemination formats available as well as their accessibility).
Overall accuracy	Provide a summary of the main sources of error and an assessment of the potential for bias (sign and order of magnitude) for each key indicator in quantitative or qualitative terms. If your data is sample-based, please also refer to sampling errors.
Time lag	Number of days from reference period to publication of first results
Comparability - geographical	Describe any problems of comparability between countries or regions. Information on discrepancies from the ESS/ international concepts and definitions should be included.
Comparability - over time	Provide information on the length of comparable time series, reference periods at which series breaks occur, the reasons for the breaks and treatments of them.
Frequency of data collection	Indicate the frequency of data collection (e.g. monthly, quarterly, annually, continuous)

3. Information sheets on Cultural Observatories

Budapest Observatory, Hungary – http://www.budobs.org/

Nature & objectives of the organisation	Founded in 1999, Budapest Observatory (BO) is a non-profit Foundation focused on Central and Eastern Europe in a 'broad sense': it covers about twenty countries between the Baltic and the Adriatic Sea, but its geographical scope keeps expanding. BO aims at observing facts and processes mainly related to the broad domain of 'financing culture' (policies, laws, etc.). BO also deals with festival statistics at national level (Hungary). The Observatory is affiliated to various networks (CIRCLE, ENCATC, Culture Action Europe and European Expert Network on Culture – EENC) which help BO find or join new projects as well as disseminate and promote its surveys and research results.
Governance & Organisational framework	The BO is composed of: **a)** a **5-member Board of Directors** gathering representatives of various Hungarian public bodies (as required by the Hungarian law on foundations) such as the national Parliament or the Hungarian Culture Foundation but also experts/academics. It defines the main orientations, budget and plan of activities of the Observatory. **b)** a **3-member Board of Supervision** gathering experts who meet in yearly meetings to provide their advice on the research activities carried out. **c)** a **Management team of 2 people** including the director and his assistant. **d)** a **1-person Research Team** which can include additional experts for *ad hoc* missions. The Observatory is formally governed by the Board of Directors. Practically, most of the decision-making power lies with the Observatory's director (Péter Inkei, director since 1999).
Resources	HR and expertise: management staff (2 people) with general expertise in the field of culture/cultural policies + freelancer researcher (1) with empirical research skills, mainly in the field of sociology + network of experts in various culture-related areas for specific missions.

	Financing: initially funded by the Council of Europe and the Hungarian authorities, in the last few years funds have mainly been obtained through European project grants (Culture Programme of the EC, Council of Europe), and *ad hoc* national grants. Grants range between € 10,000 and € 30,000 per year. IT: standard IT infrastructure, consisting in .pdf/Word questionnaires sent by email, Excel software used to process and analyse data, and website to disseminate research results. An *ad hoc* software has been set up to manage the online registry of festivals (see below).
Type of data managed	Short description Budapest Observatory mainly concentrates on: 1) the collection and analysis of experts' opinions on cultural policies in European countries (not only Eastern Europe); 2) the rating of national festivals – further presented below. BO also often examines secondary data from different sources (Compendium, Eurostat…) on various topics (e.g. employment) and presents them in its monthly memos. Data collection activities mainly pursue a research purpose, but may also contribute to advocacy and policy making, depending on the way research findings are used. Cultural Policy Barometer – Methodological features It consists in an **opinion survey** which seeks to assess the 'cultural climate' in a country as a proxy of the successes and failures of national cultural policies. Answers (around 120 on average for the 2013[148] and 2014[149] editions) are collected through questionnaires sent through the monthly 'memos' sent to the subscribers. A new round is currently being prepared. Statistical population: 147 experts from 37 countries (for 2014). Statistical unit: experts in a broad sense (from academics to cultural professionals to practitioners) who subscribed to the monthly memos. Sampling design: none. Time coverage: 2013-2014. Partnerships established: currently being sought to collect more responses per country. Frequency of release: annual – data collected each year for a yearly report. Quality & Comparability issues: quality/reliability and comparability issues across time inherent to opinion surveys based on voluntary contributions (e.g. countries are not equally represented and experts are self-selected). Also, some questions have changed due to the 'experimental' nature of the first two editions. A 'fixed' questionnaire will be used in the future. Accessibility conditions: all the data produced and the report are freely accessible at http://www.budobs.org/papers.html Online registry of Hungarian festivals – Methodological features This registry[150] was initiated in 2008 by five national festival unions and is now managed and supervised only by the Hungarian Festival Association. It contains key information on the registered festivals[151] (programme, audience, employees, etc.) Parallel to the registry,

[148] http://www.budobs.org/files/barometer%20report%2013.pdf
[149] http://www.budobs.org/files/barometer_report_14_full.pdf
[150] http://www.fesztivalregisztracio.hu/index.php?modul=cms&page=english
[151] Registered festivals: http://www.fesztivalregisztracio.hu/index.php?modul=mar_regisztraltak.

	a rating system[152] across 19 dimensions was developed by the BO: this is implemented with the help of external experts who assess the festivals against the defined criteria and dimensions. Both the registration and participation to the rating processes are voluntary-based (but the registration is a condition to be eligible for public grants). The registration process is largely automated and validation of the information submitted is ensured by the registry's management team. Statistical population: 98 qualified and rated festivals in 2010. Statistical unit: Hungary-based festivals. Sampling design: none. Time coverage: 2008-2015. Partnerships established: Hungarian Festival Association. Frequency of release: regular updates on the registered festivals[153]. Quality & Comparability issues: the same data are collected over time by the registry, but participation is voluntary so comparison across time is not always possible. Data are double checked and validated by the management team. The quality/reliability of the rating system is inherent to the kind of surveys and scoring systems based on experts' opinions. Accessibility conditions: all the data produced and the reports are freely accessible at http://www.fesztivalregisztracio.hu/index.php?modul=cms&page=english.
Delivered products, formats and accessibility conditions	- Monthly e-memos since 1999[154]; - Symposiums and seminar reports; - *Ad hoc* papers and reports (e.g. as part of European projects). All products are available in online formats, freely accessible and downloadable on the Observatory website.
Modalities of dissemination	- Memos sent to the subscribers; - Website; - Conferences, symposiums, workshops, etc.
Responsible for data and metadata	Péter Inkei, director

[152] Inkei, P. (2010). The Rating System of Hungarian Festivals. Budapest. http://www.fesztivalregisztracio.hu/download/Downloadable_flyer.pdf.
[153] See periodical summary of registered festivals: http://www.fesztivalregisztracio.hu/index.php?modul=cms&page=statisztika
[154] See list: http://www.budobs.org/narchive.html

Compendium of Cultural Policies and Trends in Europe, Bonn
http://www.culturalpolicies.net

Nature & objectives of the organisation	The **Compendium of Cultural Policies and Trends in Europe** is a non-profit and web-based partnership organisation. It was founded in 1998 as a joint venture between the Council of Europe and ERICarts (European Institute for Comparative Cultural Research), a Bonn-based institute specialised in comparative cultural research and cultural policy monitoring. Compendium functions as a constantly updated information and monitoring system of national cultural policies in Europe. In the long term, it aims at covering all 50 member states co-operating within the context of the European Cultural Convention.
Governance & Organisational framework	Compendium includes: **a) Two editors** from the Council of Europe and ERICarts respectively, the responsible bodies which impulse the main directions. **b)** a **80-member Assembly of experts**, with at least one expert per participating country. Here research activities are discussed and decisions on data collection mechanisms and the practical work are taken. **c)** a **6-person Core Team** composed of management staff, researchers and support staff
Resources	HR and expertise: management staff (2 people) + researchers (2 + 80 freelancers) with expertise on Cultural Policy / Statistics / Legal Issues / Cultural economics / Sociology / Education / etc. + support staff (2) specialised in accounting and editing. Financing: € 120,000 to € 150,000/year, almost exclusively public (except for marginal donations) from the Council of Europe. Several ministries of culture have also contributed individually. Statistical surveying represents 40 per cent to 45 per cent of Compendium's costs. Experts' cost can vary depending on the country. IT: standard IT management system to gather and process data collected at the national level (i.e. using Excel sheets), and a website to host and publish data and research.
Type of data managed	**Short description** Compendium collects both qualitative and quantitative data with the objective of providing useful information for policy-making and research purposes in the field of culture. Two major research activities are carried out: preparation and update of country profiles containing (mainly qualitative) information on national cultural policies[155]; and direct collection of quantitative data on cultural spending and price of cultural products (further presented below). Cultural data from other sources such as Eurostat or OCED are also made available on the Observatory's website, in 'user-friendly' comparative tables covering several years and countries. **CUPIX: Cultural Price Index on Goods and Services – Methodological features** Set up in 2003 (and reviewed in 2008), CUPIX provides the prices of cultural industry products (from the private sector) as well as of cultural services offered by public or subsidised arts institutions. It intends to identify trends in the evolution of prices given the Purchasing Power Parity (OECD data). Six items are covered every year: CDs, books and

[155] http://www.culturalpolicies.net/web/countries.php

	films (for cultural products) – changing each year depending on the latest blockbuster film, bestselling CD or book that is released/sold in all covered countries; and music lessons[156], opera tickets and art museum tickets in relation to major opera theatres and museums (for cultural services) – which remain stable every year. Prices are retrieved by experts, based on available resources (mostly the Internet e.g. museum websites). Statistical population: typical market /services elements in the participating Compendium countries (up to 43). Statistical unit: item/ticket price of selected cultural products and services. Geographical coverage: 43 countries (EU + neighbouring countries). Sampling design: none. Time coverage: 2008-2014. Partnerships established: country experts carry out data collection and processing on the basis of strict guidelines provided by the Compendium. Frequency of release: annually. Quality & Comparability issues: comparability for services across time is satisfactory as they relate to the same institutions and services every year. Comparability for goods is not possible as the sample differs from one year to another (e.g. different books/CDs released). Accessibility conditions: all data collected are freely accessible in the form of tables at http://www.culturalpolicies.net/web/statistics-markets.php. Public Funding of Culture – Methodological features This database contains data on governments' expenditure on culture. Where applicable, expenditure is broken down into three categories: central government, provinces/regions and municipalities. Administrative data on expenditure is collected annually by national experts in a decentralised fashion, from official data published by NSOs[157]. Experts use a template based on specific Compendium domains classification, which is inspired from the EU-LEG group's classification of public cultural expenditure[158]. Data are validated and 'adjusted' by the secretariat upon receipt. Statistical population: countries, regions and municipalities in 12-24 countries, depending on the year. Statistical unit: countries', regions' and municipalities' budgets. Sampling design: none. Time coverage: 2000-2011. Partnerships established: country experts carry out data collection and processing on the basis of strict guidelines provided by the Compendium. Frequency of release: annually. Quality & Comparability issues: geographical and time coverage can importantly vary from one year to another (i.e. latest data date from 2011 and are not available for all countries). Comparability is possible for single countries (across time), but not between countries (are cultural expenditure is counted in different ways). Although this system is still in an experimental phase, Compendium figures can already help identifying public expenditure specifically earmarked for culture in a better way than official statistics (which use broader

[156] At public music schools. When data is not available, figures for private music lessons are used.
[157] See also methodological note at http://www.culturalpolicies.net/web/statistics-funding.php?aid=232&cid=80&lid=en
[158] http://www.culturalpolicies.net/web/statistics.php

	expenditure categories). Accessibility conditions: all the data produced are freely accessible in the form of tables at http://www.culturalpolicies.net/web/statistics-funding.php?aid=232&cid=80&lid=en
Delivered products, formats and accessibility conditions	- Tables and comparative tables (online and in .pdf formats) gathering own data or data from other sources (Eurostat, EAO, UNCTAD, etc.)[159]; - A tool to monitor and benchmark countries' performances in relation to the adoption/implementation of international norms and cultural policies[160]; - Countries profiles (.pdf and .zip files) for about 42 countries; - Collection of research papers, documents and comments[161]; All products are available in online formats and freely accessible and downloadable on the Compendium's website.
Modalities of dissemination	- Website: http://www.culturalpolicies.net/web/index.php; - Coordinators-based dissemination (meetings/conferences, mailings, social media).
Responsible for data and metadata	Oliver Göbel, project coordinator

EGMUS, Berlin
http://www.egmus.eu/

Nature & objectives of the organisation	EGMUS was established in 2002 by the merge of the Working Group on Museum Statistics and the Berlin conference (set up in 1995 by the Institute for Museum Research to carry out research). The Institute for Museum Research in Berlin is the informal homebase of EGMUS. Constituted as a non-profit organisation, EGMUS gathers experts in the field of museum statistics and policy (e.g. from national ministries or museum associations) with the aim of collecting, promoting and publishing comparable museum statistics. Its data collection activity started in 1999. At present 27 European countries, from within and outside the European Union, are represented in this group.
Governance & Organisational framework	EGMUS is composed of: **a) a network of national coordinators/experts** including national administrations, professional associations or statistical offices. They collect data at national level through national questionnaires sent to the most important museums in each country. The ambition is that the national questionnaires use as much as possible from the Standard Questionnaire developed by EGMUS in order to make comparisons across countries and time possible[162]. Various countries already use it. **b) a non-permanent Core Team** coordinating the activities of the national experts and planning events and annual plenary meetings. They also act as national coordinators. The core team is a loose structure and its members vary depending on each one's dedication and availability.
Resources	HR and expertise: coordinating staff (2 people) with general expertise in museum statistics + network of national coordinators (50) with background in statistics and cultural studies/museums. Financing: € 12.000 to € 15.000/year from *ad hoc* grants. Funds are mainly allocated to

[159] http://www.culturalpolicies.net/web/statistics.php
[160] http://www.culturalpolicies.net/web/monitoring-comparisons.php
[161] http://www.culturalpolicies.net/web/themes.php
[162] http://www.egmus.eu/en/questionnaire/

	travel costs and website maintenance and updates. IT: standard IT management system to display data sorted by topic, year or country.
Type of data managed	Short description EGMUS provides statistics on the museums present in the 29 participating European countries. The data collected by national coordinators through a harmonized questionnaire (see above under 'Governance & Organisational framework) are stored in a provisional table – 'ALOKMI (Abridged List of Key Museum Indicators)' – as a first step to comparison. The table puts together a large number of relevant data from the various countries (type of museum, attendance, projects, financing and expenditure, participation, employment and technological innovations). It gives information about different topics of all participating countries from various years, depending on the availability of the data. The work on the website and the conferences are mainly done by EGMUS coordinators as part of their regular work, whilst the database is maintained and updated by the Institute for Museum Research in Berlin. Methodological features Statistical population: museums in 29 European countries. Statistical unit: museums. Sampling design: each country has its own sampling design. Time coverage: 1999 – 2015 Partnerships established: national statistical institutes/associations/administrations which provide workforce to carry out the data collection. Frequency of release: once a year when possible Quality & Comparability issues: this is precisely EGMUS' objective: so far comparability is hampered by differing definitions and practices in the partner countries and sparseness in the data (i.e. available only for some countries and for some years). EGMUS research allows identifying these differences and addressing them with the Standardised Questionnaire (when applied). Accessibility conditions: the dataset produced is accessible at http://www.egmus.eu/nc/en/statistics/complete_data/.
Delivered products, formats and accessibility conditions	– A data table accessible and downloadable in .csv format (can be sorted by topic, year or country); – Occasional national country reports describing the situation of museums (cultural and museum policies, collection of the data, other museum-related data etc.) and definitions; – The ALOKMI table, which serves as a basis to foster comparability: http://www.egmus.eu/fileadmin/statistics/Dokumente/D_E_Table.pdf; – A list of links to related topics (audience research, cultural policies) from partner countries[163].
Modalities of dissemination	– Website; user statistics year 2014: 4 495 visits, of which 1 622 are by 'returning visitors'; – Dedicated database[164].
Responsible for data and metadata	Robert Oosterhuis Monika Hagedorn-Saupe

[163] http://www.egmus.eu/en/publications/national/austria/
[164] http://www.egmus.eu/nc/en/statistics/complete_data/

ENUMERATE, European project
http://www.enumerate.eu/

Nature & objectives of the organisation	ENUMERATE was an EU-funded project (ICT Policy Support Programme) running from 2011 to 2014. Its objective was to provide a methodology and statistical data on the state of digitisation of collections in cultural heritage institutions (mainly archives, libraries and museums) in Europe. It was set up as a successor of NUMERIC, a project of the European Commission (EC) which defined units of measurement and methods for assessing the current state of heritage digitisation, given the financial investment in Europe. As from 2014, ENUMERATE operates under the umbrella of Europeana[165] and, more specifically, the EU-funded project Europeana v3.0 (CIP-ICT-PSP-2013-7), which will run until May 2015. The consortium managing Europeana v3.0 is due to collect new data on heritage digitisation based on the ENUMERATE's methodology, manage the online website and data platform, and so consolidate the use of the ENUMERATE framework.
Governance & Organisational framework	The Project was supported by three 'bodies': **a)** A **10-partner Consortium**[166] (including both public and private organisations specialised in heritage digitisation), running the project and being responsible for decision-making under the lead of Collections Trust, a UK-based charity advising cultural heritage institutions on the management of their collections; **b)** A **3-member Advisory Group** (national experts) giving their expert views on the project's work; **c) 29 National Coordinators** (public officials in relevant ministries or experts) for each EU Member state (and some others not in the EU) having a major role in implementing the ENUMERATE's surveys. The Project Consortium reported to the European Commission.
Resources	HR and expertise: temporary staff (21 people) for the project's development (e.g. methodology design, implementation of the surveys, data processing and dissemination of results) with knowledge and expertise in the field of heritage management, preservation and digitisation. The team included public officials, researchers and professional experts. Financing: € 593,860, including € 321,000 of co-funding from the ICT Policy Support Programme and € 272,860 from the Project Consortium. A lump sum co-funding of € 3,000 per year was granted to each partner to implement the survey. The data collection costs can be estimated at € 168,550, and the dissemination costs at € 79,000.[167] IT: the free and open source survey software LimeSurvey was used to administer the survey. An online data platform was tested and set up for the storage, publication and dissemination of data generated through ENUMERATE. SPSS or similar software is used for more in-depth analysis.

[165] European digital platform giving access to various types of cultural contents (e.g. image, texts, sounds, videos): http://www.europeana.eu/portal/
[166] For more information see http://www.enumerate.eu/en/about_enumerate/partners/project_consortium/
[167] Figures for the data collection cost of ENUMERATE within EUROPEANA are not available. ENUMERATE costs are integrated in Europeana's WP1 and WP3, as well as in communication costs.

Type of data managed	Short description ENUMERATE set up an online survey with the purpose of giving a snapshot of the state of cultural heritage digitisation and informing public policy makers, in particular within the EC. Three core surveys were run in total (in 2012[168], 2013[169] and 2014-2015[170]) covering 27 European countries (roughly EU). Four main areas were explored: digitisation activity, cost of digitisation efforts, access to digitised heritage collections and preservation of digital heritage materials. A more in-depth thematic survey was also run in 2013, on the same topics[171]. A pan-European standardised questionnaire was used and submitted to cultural heritage institutions across Europe, with the support of the 29 national coordinators associated to the project. The data collection process was set up and supervised by the project's leader (Collections Trust) and implemented with the support of National Coordinators (who helped cultural institutions to fill in the questionnaire). One of the partners (Panteia (NL), a research and advisory company) was in charge of checking and validating the data. Methodological features Statistical population: 1951 memory institutions (archives, AV institutes, museums, libraries or combinations thereof) for the 2012 survey, 1373 for the 2013 survey, about 1000 for the 2014 edition. Statistical unit: all memory institutions (see above) in each of the 27 EU Member States plus those abovementioned. Sampling design: none (responses are based on voluntary contributions of cultural heritage institutions). Time coverage: 2012-2015[172]. Partnerships established: National Coordinators were in charge of supporting cultural heritage institutes in completing the questionnaire, when needed, in order to facilitate data collection (e.g. reaching institutions through alternative channels; respond to queries, extend time to respond, etc.). Frequency of release: approximately each year: the 2012 study was released on May 2012 and data had been collected between January and March. The 2013 study was released in January 2014 and the data had been collected between September and December 2013. The 2014-2015 are now available, too. Comparability issues: data was collected on a population of 1951 memory institutions in the participating countries for the Core Survey 1, 1373 for the Core Survey 2 and around 1 000 for the Core Survey 3. The use of cross-time surveys including a number of core and stable questions should ensure comparability of data over time. However, comparability is hampered by the lack of representativeness of the sample used. Accessibility conditions: all the data produced are freely accessible at http://enumeratedataplatform.digibis.com/datasets
Delivered	- ENUMERATE Data Platform, a central access point containing survey reports, up-to-

[168] http://www.enumerate.eu/en/surveys/core_survey_1/
[169] http://www.enumerate.eu/en/surveys/core_survey_2/
[170] http://www.enumerate.eu/en/surveys/core_survey_3/
[171] http://www.enumerate.eu/en/surveys/thematic_survey/
[172] For some variables, e.g. total number of volunteers (in full-time equivalent) engaged in the digitisation activities, data are requested in the questionnaire since 2009.

products, formats and accessibility conditions	date statistical datasets, survey questionnaires, main survey figures (e.g. number of respondents) as well as a list of free software tools that can be used for the visualisation of datasets such as those produced by the ENUMERATE surveys; - ENUMERATE Benchmark, an online platform to benchmark your institution with other institutions in your country or other institutions of the same type; - Periodical e-newsletters on the project's activities and results; - Periodical digests (graphs on the state of digitisation; - Stakeholders' reports/ Conferences and workshops, Thematic Surveys. All products are available in online formats and freely accessible and downloadable on the project's website: http://www.enumerate.eu/
Modalities of dissemination	- Website; - Social media (Twitter LinkedIn, Flickr, Delicious); - Communication to national actors carried out by national coordinators (workshops, e-mails lists); - Partner-based dissemination (meetings/conferences, mailings, social media); As of 2014, ENUMERATE has integrated the EUROPEANA network, and can benefit from EUROPEANA communication tools (modalities tbc.): - Online professional Europeana Tech Journal; - Dissemination partnerships with Wikipedia and Google; - Europeana social media; - Europeana Professional Blog and Network newsletter (over 70,000 subscribers); - Occasional conference platforms and press releases Europeana Technical Task Force's reports.
Responsible for data and metadata	Wietske van den Heuvel (DEN) (wietske.vandenheuvel@den.nl).

European Audiovisual Observatory, Strasbourg
http://www.obs.coe.int/

Nature & objectives of the organisation	The **European Audiovisual Observatory** (EAO) is a public service organisation created in 1992 and established in Strasbourg. It is managed under an Enlarged Partial Agreement of the Council of Europe (CoE)[173], by 40 Member States and the European Union. Its mission is to collect and distribute information about the audiovisual industries in Europe by means of cooperation, as far as possible, with existing centres and institutes as well as private suppliers.
Governance & Organisational framework	EAO includes: **a)** a **41-member Executive Council**, including representatives of the 40 member States (delegates of the Ministries in charge of medias or media regulatory authorities) and the European Union as a member. It approves and adopts the actions plans and the budget. **b)** a **40-member Advisory Committee** composed of European and international

[173] "Partial agreement" is a term used within the Council of Europe to refer to a major activity of European cooperation that is organised by the Council of Europe but does not include all of its member states. Any expenditure would be made by the participating states alone.

	professional organisations representing the various branches of the audiovisual industries (production, distribution, broadcasting, etc.). **c)** a **40-member Financial Committee**, composed of the permanent representative of each member state. It gives the final green light on the budget. **d)** Other bodies (the Bureau of the Executive Council, the Secretariat and the Audit Committee) which complete the Observatory's institutional framework. **e)** A **23-people Team** split in two branches: the Department for Information on Markets and Financing and the Department for legal information. Both departments process the data received in order to produce publications, information posted online, free access databases as well as conference presentations.
Resources	HR and expertise: management staff (3 people) + analysts (9, including 8 regular employees and 1 freelancer) with backgrounds in various fields (economics, audiovisual studies, legal studies, etc.) + support staff (11) with expertise in administration, communication and data analysis + network of data suppliers in member states (over 1,000 contacts including individual correspondents, institutions, professional information suppliers, translators). Financing: € 3.2 million, mostly from annual contributions of the members. 35 per cent to 40 per cent of the annual budget comes from commercial activities (e.g. sales of studies). IT: Excel software used to process and analyse data, four online databases (IRIS Merlin, KORDA, LUMIERE, and MAVISE) developed by IT specialists and managed by EAO, and website to disseminate data and research results.
Type of data managed	**Short description** The EAO provides various kinds of data as well as economic and legal analysis in the following fields: film, broadcasting, home video, on demand audiovisual services and public policy on the audiovisual sector. The main purpose of its research and data collection activities is to promote greater transparency and a clearer understanding of the ways in which the audiovisual industries in Europe function, both from an economic and legal point of view. More or less all projects of the EAO involve the collection and analysis of large number of datasets. The EAO Yearbook alone, for instance, provides about 600 pages of datasets related to audiovisual markets covering a variety of aspects of various sectors including broadcasting, distribution of audiovisual services, on-demand audiovisual services, the film industry and the physical video market. The data are collected from a wide variety of sources including in-house research, internal databases, commercial data providers, data correspondents or questionnaires. Given the size and complexity of the Yearbook of the European Audiovisual Observatory as well as other Observatory publications, only the databases currently maintained by the Observatory are described below. **KORDA – Methodological features** KORDA[174] provides information on the amounts of public funding devoted to the promotion of film and audiovisual works established in Europe (by source, kind of

[174] http://korda.obs.coe.int/korda.php/about/EN

	activity supported and number of beneficiary projects) by compiling information from the bodies making such funding available across Europe[175]. Statistical population: 200+ film funds in Europe. Statistical unit: audiovisual works. Sampling design: none. Time coverage: 2005-2012 (project currently on hold). Partnerships established: European Film Agencies Research Network (EFARN), CineRegio (a European network on regional film funds), and the Online Film Financing (OLFFI, a database on film financing opportunities. Frequency of release: data is collected from each source once a year, the KORDA database is updated systematically and a report is produced every 3-4 years. Quality & Comparability issues: all European film funds are tracked with the exception of some minor local funds without established permanent schemes. Accuracy is ensured within the limits of the data available, which may vary from year to year. Comparability over time and across countries is possible. Accessibility conditions: all the data and reports produced are freely accessible at http://korda.obs.coe.int/. **LUMIERE – Methodological features** LUMIERE[176] provides a systematic compilation of available data on admissions to the films released in European cinemas since 1996. The data base gathers data from various specialised national sources as well as the MEDIA Programme of the European Union[177]. Statistical population: European cinemas. Statistical unit: films released in European cinemas. Sampling design: none. Time coverage: 1996-2013. Partnerships established: the EC MEDIA programme and Rentrak, a research company in the entertainment industry which collects data from specialised national sources (e.c. national cinema institutes). Frequency of release: annual data is published on a sequential basis as they are imported into the database. Quality & Comparability issues: it is estimated that about 87 per cent of total admissions in Europe are covered. However, coverage rates and data collection methodologies vary between countries and across time. Accessibility conditions: all the data produced are freely accessible at http://lumiere.obs.coe.int/web/search/. However, access to more sophisticated statistical tools is granted only to a limited number of OBS stakeholders, mainly public service bodies. **MAVISE – Methodological features** MAVISE[178] provides a compilation of TV channels and on-demand services by geographical coverage, country of establishment, genre, language, ownership (private/public), etc. The data allows searches for companies by activities (broadcaster,

[175] See also 'KORDA sources of information' at http://korda.obs.coe.int/korda.php/about/EN#4
[176] http://lumiere.obs.coe.int/web/search/
[177] http://lumiere.obs.coe.int/web/sources/
[178] http://mavise.obs.coe.int/

	provider of on-demand services, cable operator, provider of satellite package etc.). A high number of sources is used to compile this dataset[179]. Statistical population: TV channels, on-demand services, distribution platforms, companies, countries (Member States plus (with less detail): Republic of Serbia, and "Euromed countries" (Algeria, Egypt, Jordan, Palestine, Lebanon, Tunisia)). Statistical unit: units, as above. Sampling design: none. Time coverage: does not contain historical data but provides snapshots of the market since 2008. Partnerships established: commercial arrangement with Lyngsat (private company tracking satellites broadcasting radio and television programmes) for the provision of data on satellite channels and packages. Informal co-operation with regulatory authorities regarding services licensed/registered. Frequency of release: the database is frequently updated. Quality & Comparability issues: MAVISE is the only comprehensive database of its kind. Given the dynamism, size and technological flux of the market, it is accurate at the moment of update. It ensures complete coverage of the EAO members and less details the Euromed countries and Republic of Serbia. Comparability over time is not possible from the database (as it does not contain historical data) but it is possible from the Yearbook (which is not accessible for free). Accessibility conditions: the database is freely accessible at http://mavise.obs.coe.int/advanced_search. EAO also made use of Amadeus+ (an enlarged version of the Amadeus database published by Bureau Van Dijk Electronic Publishing (See http://www.bvdinfo.com/en-gb/our-products/company-information/international-products/amadeus) to get more accurate statistics on the sector. In the AMADEUS+ version elaborated by the Observatory, around 30,000 companies have been re-indexed by main activity in order to provide more precise classification and aggregates according to the NACE Rev.2 nomenclature. The Observatory also included information on public broadcasting organisations and additional financial data following the EBU nomenclature. Amadeus+ allows the Observatory to make structural business statistics on the audiovisual sector with a rather high level of accuracy (see for example in the Yearbook 2014 the analysis of the revenues of foreign affiliates companies in the EU). **MERLIN – Methodological features** MERLIN[180] provides a compilation of more than 7.000 articles concerning legal aspects of the audiovisual industry (relevant laws, decisions of various courts and administrative authorities, and policy documents). Statistical population: not applicable. Statistical unit: not applicable. Sampling design: not applicable. Time coverage: 1995-today. Partnerships established: IRIS Network (including four partner institutions, five partner

[179] See 'Methodology of data collection' at http://mavise.obs.coe.int/about
[180] http://merlin.obs.coe.int/

	magazines, more than 60 correspondents from 36 countries and various organisations) Frequency of release: the database is permanently updated. Quality & Comparability issues: the EAO is keen to ensure that it only publishes articles that have been researched and written with the utmost thoroughness and accuracy. To this end, it calls on a carefully selected IRIS network of experts as well as highly qualified translators and proof readers. Articles are collated and coordinated by the Observatory and its partner institutions, edited by the Observatory and then sent out for translation into the other official languages. All versions of the text are then proofread again before being submitted to the Observatory for a final inspection. Accessibility conditions: articles are freely accessible at http://merlin.obs.coe.int/. The articles include exact references to the original legal texts and, where possible, give access to them through hyperlinks.
Delivered products, formats and accessibility conditions	- Databases described above are downloadable (excel formats) and accessible within certain limits, e.g. copyright and confidentiality provisions, and limited access to certain tools of the LUMIERE database; - Reports and studies, which are either for free or against payment – all available electronically, some also as print publications[181]; - Yearly publication of the 'Yearbook – Television, cinema, video and on-demand audiovisual services – the pan-European picture'[182]; - Specific information services (e.g. LUMIERE PRO), for which it has developed specific platforms. Access is restricted and the service sold in order to cover the related costs; - Information services (against payment) on specific issues, where information is provided in form of notes, reports or newsletters.
Modalities of dissemination	- Website & embodied online databases; - Social media (Facebook, Twitter); - Digital and printed publications; - Professional events to share results (events organised by the Observatory are open to the general public, except for expert workshops where participants are personally invited).
Responsible for data and metada	Andre Lange (Gilles Fontaine as of 01/06/2015) for Department for Information on Markets and Financing (DIMF) Maja Cappello for Department for Legal Information (DLI)

Observatoire de la Culture et des Communications du Québec (OCCQ), Canada – http://www.stat.gouv.qc.ca/statistiques/culture/

Nature & objectives of the organisation	The Observatoire de la Culture et des Communications du Québec (OCCQ) is a governmental body founded in 2000 and working under the umbrella of the Québec Statistics Institute (ISQ), the governmental statistics agency. Its mission is to produce, analyse and disseminate statistics in the field of culture and communication in Québec. The Observatory was created in response to the need for better information and statistics as expressed by regional stakeholders in the sector, including professionals and public authorities.

[181] For more details see http://publi.obs.coe.int/web/obs-portal/shop/prodfamily
[182] For more details see http://www.obs.coe.int/en/shop/yearbook

Governance & Organisational framework	The Observatory is composed of: a) a **6-member Committee of Financial Partners** composed of the director of the OCCQ and representatives of various public bodies (Ministry of Culture of Québec, Québec Statistical Institute, cultural agencies…) who define the strategic directions of the Observatory by approving three-year and annual plans. b) a **15-member Consultative Committee** submitting recommendations to the Committee of Financial Partners on the three-year and annual plans. It is composed of the director of the OCCQ, the 8 presidents of the advisory committees and representatives of the six financial partners. c) **8 Consultative Committees** carrying out the preparatory work to feed in the annual and three-year plans in relation to the different sectors that they represent. They gather the representatives of the regional sectoral associations in various cultural and creative fields (e.g. music, books, multimedia, etc.). d) **a 9-person Team** carrying out the operational data collection and processing work.
Ressources	HR and expertise: management staff (1 person) + researchers (8 regular employees) with background in social and human sciences (economics, sociology, etc.) and great knowledge of the cultural sector + other experts from the QSI that the team can rely on when needed (statisticians, survey experts, etc.). Financing: € 928,000/year[183], almost exclusively public (Québec government). IT: Computer-Aided Telephone Interviewing (CATI) software and web questionnaires used for data collection. An online database[184] managed by the ISQ has been created for the purpose of centralising and disseminating more easily the data collected. The OCCQ benefits from this platform, although it is not the only user.
Type of data managed	**Short description** The OCCQ collects a large amount of data on the state of culture and communication activities in Québec. Here the focus is on the most recurring surveys, regularly and most recently carried out by the Observatory. **Cinema attendance survey – Methodological features** The cinema attendance survey[185] looks at the figures on cinema admissions in Québec, with focus on ticket price, number of projections, occupancy rates and box-office revenues. Statistical population: cinemas in the Québec region. Statistical unit: feature films. Sampling design: none – all cinemas in the region included. Time coverage: 1985 – 2015. Partnerships established: none. Frequency of release: data are collected from all cinemas and published on a weekly basis in an online database. Quality & Comparability issues: weekly data are accurate and comparable over time, with response rates nearing 100. Accessibility conditions: weekly data and detailed yearly reports and data are freely

[183] As converted in April 9th, 2015, from C$1,25 million
[184] http://www.bdso.gouv.qc.ca/docs-ken/vitrine/culture/index.html
[185] http://www.stat.gouv.qc.ca/statistiques/culture/cinema-audiovisuel/resultats-exploitation/index_an.html

	accessible at http://www.stat.gouv.qc.ca/statistiques/culture/cinema-audiovisuel/resultats-exploitation/index.html. **Book sales survey – Methodological features** The new book sales survey[186] collects data on the sales of new books to individuals or organisms for their own use (rather than for resale). It considers all types of books, including digital books. Statistical population: booksellers in Québec excluding large retailers (Target, WalMart until 2015, Costco, etc. are not surveyed: sales are estimated based on what the distributors and editors sell them). Statistical unit: bookshops, distributors and publishers. Sampling design: none – all bookshops, distributors and publishers in the region are included. Time coverage: 2001-2015. Partnerships established: none. Frequency of release: data are collected and published online on a monthly basis. Quality & Comparability issues: data are accurate and comparable. However, an important data revision in 2012 means that monthly data for bookstores before 2011 are no longer available and certain tables found in publications printed before 2012 are no longer valid. A methodological change in the calculation of distributors' sales for widespread distribution beginning in 2007 results in a breakdown of these sales between superstores and other points of sales which are not comparable with the breakdown before 2007. Totals remain valid. Accessibility conditions: yearly reports and monthly data are freely accessible at http://www.stat.gouv.qc.ca/statistiques/culture/livre/vente/index.html. **Museums attendance survey – Methodological features** The museum institutions attendance survey[187] contains statistics on the attendance of different types of visitors (schools, groups, individuals) to different types of institutions: museums, exhibition centers, outdoor exhibitions and interpretation sites in Québec. Statistical population: all 440 museum institutions in Québec. Statistical unit: museum institutions. Sampling design: none – all museum institutions in the region are included. Time coverage: 2003-2014. Partnerships established: none. Frequency of release: data are collected and published online every quarter. Quality & Comparability issues: statistics released by the Observatory are the result of the compilation of data provided by the museums that responded to the survey (more than 98 per cent). Admissions are counted manually or through an automated counting device. Overall, data are considered accurate and comparable over time. Accessibility conditions: biannual reports and yearly, quarterly and monthly data are freely accessible at http://www.stat.gouv.qc.ca/statistiques/culture/patrimoine-musees-archives/institutions-museales/index.html.

[186] http://www.stat.gouv.qc.ca/enquetes/culture/efim_an.html
[187] http://www.stat.gouv.qc.ca/statistiques/culture/patrimoine-musees-archives/institutions-museales/index_an.html

	Municipal expenditure on culture survey – Methodological features The municipalities' expenditure on culture survey[188] gathers data on the cultural expenditure of municipalities in the region. Statistical population: local municipalities in Québec (1 111). Statistical unit: local municipalities in Québec. For the non-responding ones, as well as towns with under 5 000 inhabitants, estimates are made using data from the Ministère des Affaires municipales et de l'Occupation du territoire. Sampling design: none – all local municipalities in the region included. Time coverage: 2007-2013. Partnerships established: none. Frequency of release: data are collected and published in an online database on a yearly basis. Quality & Comparability issues: for municipalities of 100,000 inhabitants and above, the response rate is 100 per cent. Data are therefore accurate and comparable over time. For municipalities with less than 100,000 inhabitants, data are accurate and comparable within the limits of estimates for smaller municipalities (which represent the majority of the municipalities in the region). Accessibility conditions: yearly reports and data are freely accessible at http://www.stat.gouv.qc.ca/statistiques/culture/depenses-culturelles/municipal/index.html. **Quebec government expenditures on culture survey – Methodological features** The Quebec public expenditure on culture survey gathers[189] data on the cultural expenditure by government departments and agencies. Statistical population: all departments, ministries, agencies, commissions, boards, special funds and government business enterprises of Quebec that have expenditures with respect to culture. Statistical unit: See above. Sampling design: none – all departments, ministries, agencies, commissions, boards, special funds and government business enterprises of Quebec that have expenditures with respect to culture in the region included. Time coverage: fiscal years 1985-86 to 2012-2013. Partnerships established: none. Formerly conducted with Statistics Canada. Carried out solely by the Observatory since 2012. Frequency of release: data is collected and published in an online database on a yearly basis. Quality & Comparability issues: Data is comparable and accurate. Accessibility conditions: yearly data and a particular report are freely accessible at http://www.stat.gouv.qc.ca/statistiques/culture/depenses-culturelles/provincial/index.html **Performing arts attendance survey – Methodological features** The performing arts attendance survey[190] looks at the attendance to performing arts

[188] http://www.stat.gouv.qc.ca/enquetes/culture/edmtc_an.html
[189] http://www.stat.gouv.qc.ca/statistiques/culture/depenses-culturelles/federal/index_an.html

	events requiring a paid ticket by genre and location in Québec. Statistical population: all performing arts shows requiring a paid ticket in Québec. Statistical unit: performing arts venues, producers and other venue owners that rent out performance space. Sampling design: none – all paid performing arts shows in the region included. Time coverage: 2003-2014. Partnerships established: none. Frequency of release: data are collected and published in an online database on a bimonthly and a yearly basis. Quality & Comparability issues: statistics released by the Observatory are the result of the compilation of data provided by the venues and producers that responded to the survey. Overall, data are considered accurate and comparable over time. Accessibility conditions: yearly reports and bi-monthly data are freely accessible at http://www.stat.gouv.qc.ca/statistiques/culture/arts-scene/frequentation-spectacles/index.html. **Artworks acquisition survey – Methodological features** The artworks acquisition survey[191] gathers data on the type of buyer (museums, collecting businesses and governments), the value and type of artworks as well as the provenance of the works. Statistical population: 30 museum institutions, 30 companies, six largest municipalities of Québec and a variety of other institutions. Statistical unit: museums, collecting businesses and governments. Sampling design: none – all identified collecting institutions are surveyed (given that only institutions known for acquiring art on a regular basis are identified. Time coverage: 2001-2013. Partnerships established: none. Frequency of release: data are collected and published in an online database on a yearly basis. Quality & Comparability issues: data are overall comparable over time (within the core collecting organisations considered). The survey is not exhaustive as organisations that acquire artworks only sporadically are not included. Accessibility conditions: biannual reports and yearly data are freely accessible at http://www.stat.gouv.qc.ca/statistiques/culture/arts-visuels/acquisition-oeuvres-art/index.html. **Sound recordings sales – Methodological features** Data on sound recordings sales include sales of sound recordings[192] in Québec, differentiating between physical and digital sales, and artistic and non-artistic recordings. Statistical population: 200 weekly and 500 annual best-selling titles in Quebec. Statistical unit: sound recordings. Sampling design: none – all 200 weekly and 500 annual best-selling titles in Quebec are analysed.

[190] http://www.stat.gouv.qc.ca/enquetes/culture/efsq_an.html
[191] http://www.stat.gouv.qc.ca/enquetes/culture/esaoaq_an.html
[192] http://www.stat.gouv.qc.ca/statistiques/culture/enregistrement-sonore/vente/index_an.html

	Time coverage: 2006-2015. Partnerships established: data are bought from Nielsen SoundScan[193], a private information and sales tracking system. The identification of Quebec titles on the weekly and annual lists is carried out by l'ADISQ, the Quebec recording industry, stage and video association. Frequency of release: data are collected and published in an online database on a monthly and an annual basis. Quality & Comparability issues: data are accurate and comparable over time, within the limits of the selected titles (which do not represent the overall sales of sound recordings). Accessibility conditions: yearly reports and weekly data are freely accessible at http://www.stat.gouv.qc.ca/statistiques/culture/enregistrement-sonore/vente/index.html. **Videograms sales – Methodological features** Data on videograms sales[194] includes sales of videograms (DVDs, Blu-rays) in Québec, differentiating between media supports, first market (television, cinema, other) and country of origin. Data are also available in aggregated form per various geographical areas in Québec. Statistical population: all types of videograms in Québec destined for the retail market. Statistical unit: videograms (TV programmes, films and various productions). Sampling design: none – all sold videograms (except those from the independent retailers, local chains, specialised web sites and sales without an intermediary such as at live shows). Time coverage: 2004-2015. Partnerships established: data are bought from Nielsen Videoscan database. Frequency of release: data are collected on a weekly basis and published in an online database on a monthly and a yearly basis. Quality & Comparability issues: data are accurate and comparable over time. Accessibility conditions: yearly reports and weekly data are freely accessible at http://www.stat.gouv.qc.ca/statistiques/culture/cinema-audiovisuel/dvd/index.html
	Other types of data Data from Statistics Canada - Other data on the sector (e.g. on employment, economic performance, etc.) are extracted from surveys carried out by Statistics Canada. - Administrative Data - The Observatory publishes a large amount of data from its financial partners, most of which is administrative data. For example: - data on independent film and television production and on services production (foreign shooting) from Quebec's refundable tax credit programs administered

[193] http://www.nielsen.com/us/en/solutions/measurement/music-sales-measurement.html
[194]

	by the Societé de développement des entreprises culturelles (SODEC); - data on film and videogram (DVD, Blu-Ray) distribution and on the supply side of videogram market from the Régie du Cinéma's classification process and associated oversight of distributors and video retailers; - data on libraries from the Ministère de la culture et des communications du Québec (MCC) and Bibliothèque et Archives nationales du Québec (BAnQ); - data from the Ministère de la culture et des communications du Québec (MCC) related to the acquisition of artworks under the Policy of integration of art in architecture, buildings, government and publics sites (so-called policy of '1 per cent').
Delivered products, formats and accessibility conditions	- Data from the surveys and other sources listed above, are accessible (and downloadable in .csv and .excel format, in many cases with the possibility of user-customisable data tables) from the respective sections of the Observatory's website; - Interactive charts and tables can also be viewed on the Culture and communications dashboard; - Bulletins (105 in total as of 2015) accessible and downloadable online; - *Ad hoc* studies (in partnerships with national film/library/arts/cultural industries institutions who provide data[195]); - Over 600 tables online, accessible and downloadable; - Over 25 freely downloadable studies, reports or monographs online.
Modalities of dissemination	- Website; - Monthly editorial at a Québec radio station; - Presentations at seminar and symposiums, including international ones (UNESCO, WIPO, etc.).
Responsible for data and metadata	Christine Routhier, coordinator.

UNESCO Statistical Institute, Montreal, Canada
http://www.uis.unesco.org/

Nature & objectives of the organisation	Established in 1999 as a semi-autonomous organisation aimed to meet the growing need for reliable and policy-relevant data, the **UNESCO Institute for Statistics** (UIS) is the statistical branch of the United Nations Educational, Scientific and Cultural Organisation (UNESCO). The Institute focuses on three main kinds of activities: data collection to monitor trends at national and international levels, production of methodologies and standards for harmonisation and comparability purposes, and capacity building by offering training, technical support or advice to member states. The Institute is hosted by the Université de Montréal at the Montreal's École des hautes études commerciales (HEC Montréal).
Governance & Organisational framework	The Institute is composed of: **a)** a **12-member Governing Board**[196] that consists of international experts, representing users and producers of statistics from different regions and international organisations.

[195] For instance, a report on the film industry and independent TV production was published in 2014: http://www.stat.gouv.qc.ca/statistiques/culture/cinema-audiovisuel/stats-industrie-film_an.html

	The Board's primary tasks are to define UIS policy and broad functions, as well as to approve the yearly Institutional programme and budget. The Board also monitors, evaluates and provides guidance on the Institute's operations. **b)** Several units (science, data processing, IT services, finance and administration, field units, etc.) and teams amongst which, a **4-person Team** in the Culture Statistics Unit which reviews and validates processed data.
Resources	HR and expertise: For the Culture Statistics Unit: Management staff (1 person) + researchers (4) with expertise in the field of culture and social sciences. Technicians from the Data Processing and Standardisation Unit + external experts for specific missions + UNESCO staff working in decentralised units in member states supporting data collection activities locally, when needed. Financing: € 8.91 million [197] including around € 2.97 million [198] from UNESCO member states and contributions from donors. The cost of running the Culture Statistics Unit amounts to € 450,000[199] (including staff costs). IT: data are collected, captured and processed at UIS in a centralised manner by the Data processing and Standards Unit.
Type of data managed	Short description The UIS' Culture Unit mainly collects quantitative data in two main areas – feature films and, since 2015, cultural employment (further presented below) – with the purpose of gathering evidence of the economic impacts of culture. Third party data are also used (from UNCTAD, WTO and UNSD) to obtain data on trade of cultural goods and services. The UNESCO framework is applied to obtain such data. In addition to data collection, methodological and research assignments are regularly carried out. For instance, UIS is the author of several methodological papers aimed at setting standards and improving data quality in the field of CCS[200]. UIS also carried out various mappings/analysis of CCS based on existing data[201]. Feature Film Statistics survey – Methodological features The feature films statistics survey[202] collects data on released films in order to monitor global trends in selected areas of this industry (box-office, linguistic diversity, country of production, distribution mechanisms). It is an e-mail survey gathering administrative data collected by national organisations responsible for cinema statistics. The respondent can therefore be the national Ministry of Culture, the National Statistical Institute or other relevant institution (e.g. national cinema institute). Data is collected, captured and processed at UIS in a centralised manner by the Data Processing and Standards Unit. A data report is sent to the respondent for feedback. The subject matter team (Culture Team) reviews and validates the processed data. Statistical population: feature films.

[196] For more information, see http://www.uis.unesco.org/AboutUIS/Pages/governing-board.aspx
[197] As converted in April 9th, 2015 from C$12 million
[198] As converted in April 9th, 2015 from C$4 million
[199] As converted in April 10th, 2015 from C$600,000.
[200] http://www.uis.unesco.org/Culture/Pages/default.aspx
[201] See, for instance, a study on CCS in Serbia (UIS 2015): http://www.uis.unesco.org/culture/Pages/fcs-case-study-serbia.aspx
[202] http://www.uis.unesco.org/culture/Pages/cinema-survey-launch-2014.aspx

	Statistical unit: feature films. Sampling design: none. Time coverage: 2005-2013. Partnerships established: none. Frequency of release: every two years. Quality & Comparability issues: data are comparable over time and across countries. Accessibility conditions: all the data produced are freely accessible at http://data.uis.unesco.org/Index.aspx?DataSetCode=CUL_DS&popupcustomise=true&lang=en **Cultural employment survey – Methodological features** The cultural employment survey[203] will collect data on the size and characteristics of the cultural labour force in the economy of a number of countries. It will be an e-mail survey collecting data from NSIs. This survey is being prepared building on the results of the 2013 Employment Metadata survey[204] and a pilot survey carried out in 2014 in 20 countries. Statistical population: persons in the Labour force aged 15+ in 197 countries. Statistical unit: individuals employed in cultural occupations and in cultural industries. Sampling design: varies by country. Time coverage: 2014 (first data collection in 2015). Partnerships established: none. Frequency of release: every two years. Quality & Comparability issues: data aim at being comparable over time and across countries, within the limits of data availability per country with different levels of details (e.g. 3 or 4 digits NACE codes). Accessibility conditions: data will be freely accessible.
Delivered products, formats and accessibility conditions	- Online dedicated "Data Centre" available to the public at http://data.uis.unesco.org/; - Analytical reports and technical reports[205]; - Methodological Handbooks[206]; - Fact sheets[207].
Modalities of dissemination	- Website and online database platform; - Products are freely downloadable online; - UIS publications; - other UN publications.
Responsible for data and metadata	José Pessoa, Culture Statistics Unit (review and data validation) Brian Buffett, Data processing and standards unit (data collection, capture and processing).

[203] http://www.uis.unesco.org/culture/Pages/employment-pilot-survey-launch.aspx
[204] The purpose of this survey was to collect information on the sources of labour statistics, including labour force surveys (LFS), population and household censuses (PHC) and other national household surveys (NHS). The results can be accessed at: http://www.uis.unesco.org/culture/Documents/IP23-culture-employment-metadata-en.pdf
[205] See http://www.uis.unesco.org/Library/Pages/default.aspx?tab=culture
[206] See for instance http://www.uis.unesco.org/culture/Pages/fcs-measuring-participation-handbook.aspx and http://www.uis.unesco.org/culture/Pages/festival-statistics.aspx
[207] See http://www.uis.unesco.org/FactSheets/Pages/Culture.aspx

4. Data on Museums and Libraries, and Publishing from BACH

Sector	Country	Year	Percentage of national firms in sector included in BACH	Percentage of overall sectoral employment included	Turnover	Gross Value Added	Number of firms included	Aggregate Number of employees	Intangible assets as percentage% of all assets	Staff costs as percentage of turnover	GVA/ Turnover	Staff costs /GVA
R91 Museums and Libraries	Austria	2010	46.24		122,013	74,865	43	844	0.36	50.09	61.36	81.64
	Belgium	2010	98.88	94.61	57,423	27,610	88	421	0.98	25.61	48.08	53.27
		2013	99.00	100.00	335,514	76,634	99	558			48.13	
	Czech R.	2010	31.30		12,506	6,357	21	303	0.10	30.40	50.80	59.80
	Spain	2010	15.12	25.71	123,850	63,161	195	1,986	2.82	44.86	51.00	87.96
	France	2010	23.95	49.54	273,157	149,268	63	2,122	5.73	30.61	54.65	56.01
		2013	27.24	44.76	342,907	195,818	76	2,977				57.11
	Italy	2010	2.30		207,625	130,178	9	3,856	3.21	51.52	62.70	82.18
	Poland	2010			69,961	31,451	26	1,470	0.32	34.50	44.95	76.74
	Portugal	2010	95.24	99.80	51,844	24,738	80	1,004	0.46	37.35	47.72	78.28
		2013	97.92	99.85	68,711	36,534	94	1,356			53.17	
	Slovakia	2010	74.32	90.00	8,680	3,860	55	270	0.23	32.46	44.47	72.99
J58 Publishing	Austria	2010	47.13		2,547,421	1,015,271	460	12,066	8.01	30.42	39.85	76.32
	Belgium	2010	96.90	99.29	2,641,459	860,033	1,157	8,281	5.00	21.80	32.56	66.96
		2013	99.73	99.99	2,397,492	780,834	1,129	8,026			32.57	
	Czech R.	2010	12.80		857,317	285,909	249	8,978	6.20	24.80	33.30	74.40
	Germany	2010	3.78		6,082,645	2,391,554	189		2.12	27.08	39.32	68.88
	Spain	2010	26.02	40.97	2,835,886	1,046,549	1,725	18,855	6.10	28.88	36.90	78.25
	France	2010	24.91	78.08	19,913,294	7,564,058	1,676	83,947	15.69	30.95	37.98	81.47
		2013	24.05	79.63	22,324,909	8,844,880	1,608	88,931			39.62	
	Italy	2010	5.96		10,948,599	3,772,258	234	32,037	17.39	23.01	34.50	66.70
	Poland	2010			2,878,594	1,054,844	415	35,384	6.40	24.96	36.64	68.12
	Portugal	2010	94.29	98.97	1,337,413	500,634	1,552	12,347	7.41	29.54	37.43	78.92

		2013	91.90	87.59	905,216	318,946	1,498	9,030				35.23
	Slovakia	2010	56.21	82.00	431,214	139,072	674	4,900	4.29	19.58	32.25	60.71

Source: BACH www.bach.banque-france.fr, accessed April 2015. Data are derived from submissions by National Banks except in the case of Italy (private body). All variables are defined in BACH User Guide (https://www.banque-france.fr/fileadmin/user_upload/banque_de_france/Economie_et_Statistiques/BACH-Summary-Userguide.pdf).

5. Composite index on cultural access and participation in Europe

As an example of composite index on cultural access and participation that could be developed by the CCS Observatory (Scenario 3), we present the proposal developed by Andreas Joh. Wiesand a couple of years ago.

THE 'HELSINKI PARTICIPATION RESEARCH PROCESS' – ACHIEVEMENTS AND PROSPECTS

Andreas Joh. Wiesand, Bonn (Executive Director, ERICarts Institute; Co-Editor of the "Compendium")[208]

A Europe-wide **composite index on cultural access and participation in Europe,** or even the more modest goal of **participation indicators** set in 2012 by the Council of Europe's Parliamentary Assembly (PACE), can only be achieved, if corresponding national surveys are not simply made available, but are also gradually harmonised and complemented by additional information. Some of this information, regarding e.g. the rapid changes taking place due to demography trends or new digital technologies, is already available in the Council of Europe/ERICarts "Compendium" information and monitoring system (www.culturalpolicies.net), in several comparative studies or could be delivered by partners, such as the European Audiovisual Observatory.

Surveying only 'participation' as such (if understood in a traditional sense, e.g. attending X times an arts event or enrolling in a related educational programme) would not be sufficient to either provide intelligence that is useful for democratic cultural, media and educational policymaking, or to enlighten us with regard to more complex creative processes, including those in the arts or the "creative industries". Instead, the results of such surveys need to be digested against the background of **information on national or regional traditions and achievements** (take, for example, the popular singing traditions in the Baltic region) as well as of **best practices or indicators that highlight the impact of cultural activities in democratic societies**. In addition, they need to be **compared or complemented with existing statistics**, including e.g.

Infrastructural data (that also highlight accessibility, demographic differences and, again, national specialities – see for example the well-developed Nordic library systems);

- **Comparative user statistics** published by international associations (museums, libraries, cinemas, etc.);
- **Time use surveys**, many of which subscribe already to the harmonised European Time Use Survey (TUS) model of Eurostat;
- **Production and sales figures** in different branches (e.g. in the book or games market); or
- **Statistics covering access to and practices in the "new media"**.

Nevertheless, and if we take a pragmatic approach, gradually closing the current (knowledge) gap of national participation surveys remains a priority task. There is probably more around that could possibly be used for comparative indexing than we are aware of (as could be seen from several contributions at the CultureWatchEurope-Conference "Cultural Access and Participation – from Indicators to Policies for Democracy", Helsinki June 30, 2012): This may also be a linguistic problem, since many national surveys were not yet translated (cf. the German "KulturBarometer" surveys carried out during more than 20 years).

In this context, the **Access & Participation Research Process** envisaged in Helsinki 2012 consists of 10 steps:

[208] Contribution at the 10th Conference of Ministers responsible for Culture, Moscow 15 to 16 April 2013 (Council of Europe)

Identify **existing (national) cultural participation surveys/statistics** and those responsible for them (whether organised by the state, by arts councils or by independent institutes) – this step has partly been accomplished; cf. the annexed provisional overview of surveys in 26 European countries.

1. **Assess the content** (questionnaires and results) of these surveys in order to find differences and commonalities that could lead to an improved draft model of a future participation index (with figures from existing compatible surveys in e.g. 3 – 5 countries) – this task is to be part of the work of a new Compendium Expert Group on "Cultural Access & Participation Issues", assisted by the ERICarts Institute;

2. Identify **potential partners** (ministries, arts councils, others) in countries without recent national surveys as well as **institutions providing complementary statistics** (EAO, Eurostat, etc.) – this step is under way;

3. Invite those identified in 1. and 3. above to a **first conference** where the results of 2. are presented and a **roadmap for future cooperation** is approved (led by a group of experts);

4. Develop a **flexible surveying tool with "minimum requirements"** (a set of similar basic questions to be asked in as many countries as possible – be it in the context of larger, existing participation surveys, most of which are already reported on in the "Compendium", or in the cheaper form of "bus" questions added to other, more general population surveys in those countries, where this type of research is still missing)

5. **Launch a test phase with surveys** using these questions in a number of countries (8–10);

6. **Evaluate the findings** of the test phase and propagate the results in an attractive, easy to digest way (in order to garner support and participation in additional countries) while not excluding needed **improvements of the tool**, especially as regards more elaborate information on "active" cultural participation, on new digital opportunities or on practices of people with a migration background;

7. Invite to a **2nd conference** where the tool is being improved and additional providers of complementary data take part, leading to a **"European Cultural Participation Consortium" (ECPC)**;

8. Carry out and evaluate a **second run of surveys** with the improved tool (covering more countries), leading to a **first composite ECPC Index**;

9. Run **regular ECPC-compatible surveys** and publish the Index bi-annually.

As demonstrated by the HETUS experience (Eurostat-guided time use surveys), this **10-step Process will probably take several years** (at least 3–4, to be practical). However, it may produce interesting results even after the first year: The annual CUPIX price-index of cultural goods and services, a Compendium service since 2003, has proven that a start with only a few countries can already deliver meaningful lessons and will also be an incentive for other countries to join such an exercise. Complementing the work of the ERICarts Institute and the Council of Europe, many experts that are engaged in the Compendium community of practice or in bodies such as the European Association of Cultural Researchers (ECURES) will surely contribute their know-how to the national stock-taking and evaluation; support also from Eurostat should not be excluded.

Of course, carrying out such steps in a scientifically correct, responsible manner will require some extra **funds, e.g. for the conferences and the evaluation work**, even if the main costs (for the national surveys) are to be absorbed by the participating countries or by the institutions that will conduct the surveys. Such an approach is realistic: Not long ago, the ERICarts Institute assisted in the organisation of the first shared German-Finnish survey on cultural participation of people aged over 50 years, which has been carried out by Zentrum für

Kulturforschung (ZfKf) and the Foundation for Cultural Policy Research (CUPORE). Given the fact that the Council of Europe or its "CultureWatchEurope" initiative will not be in a position to provide the means for covering (all of) the cost-incurring actions, a **partnership with the EU,** possibly in the format of a "Joint Project", and/or with other interested parties should be envisaged.

Regardless of how this process is organised, it should be guided by a clear focus on contributing to **a sound basis for future multi-stakeholder policymaking and comparative research** in the wider cultural sphere, achieved through **shared efforts by governments and European bodies, statistical offices or companies conducting surveys and national experts** from all corners of Europe.

Finally, let me anticipate **one important outcome of this exercise**: In the end we could be reminded that fostering a mere quantitative growth, e.g. in attendance or sales figures, should not be the ultimate aim of policies in our domain and that, instead, we are all indebted to the **creative individual in his or her social environment**. This includes helping to open doors **towards equitable access to a diverse cultural life**, but excludes producing stereotypes regarding the mind-sets and behaviour of people in a democratic society.