



# POLICY RECOMMENDATIONS STATISTICAL ANALYSES AND MAPPING OF CCIs



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### Measuring creative economies: a critical review of CCIs

### D2.3 Policy recommendations statistical analyses and mapping of CCIs

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### **Executive summary**

Developing Inclusive & Sustainable Creative Economies (DISCE) is an interdisciplinary, mixed-methods project. The overarching research question for DISCE is: "what are inclusive and sustainable creative economies, and how can they be developed?" Since the cultural sector is increasingly recognised as an important component of modern economies, as part of the overall research design, WP2 has a specific role in helping to identify and analyse empirical approaches to mapping and measuring creative economies across the EU via a referenced taxonomy of the Cultural and Creative Industries (hereafter CCIs).

The statistical analysis and mapping among states in the cultural and creative domains is an old concern. Methods and contents are very different from one country to another because the statistical development at the national level is mainly addressed to issues of national cultural policies and their evaluations.

A series of influential frameworks of the CCIs have provided the basis for previous processes of measurement and mapping. For instance, a range of different taxonomies has been provided, also influenced by different policy imperatives. Each approach has its own consequences on the way the CCIs perimeter could be operationalized. By the way, to unlock the potential of CCIs and to pave the way for evidence-based policies each domain of CCIs should be measurable. The underlying data required to produce the measure must be available or, if not presently available, there must be a practical methodology available to obtain the required data.

In Europe, in the framework of statistical systems currently implemented, the data generally provided by national statistical institutes either do not offer the level of details required or are not available at all for important dimensions characterizing CCIs.

In this open debate, the specific contribution of DISCE is developing its own conceptual and empirical assessments, including providing measurements relating to the inclusive and sustainable creative economy beyond these existing frameworks. Deliverables D2.1 and D2.2 cope with these challenges. This D2.3 is organized in three sections. The aim of 1 section is to clarify theory on "what" should be mapped and statistically analyses the cultural and creative industries realm. Section 2 deals with the question "how" and focuses on the operationalization of statistical categories that define the CCIs perimeter and taxonomy. Finally, Section 3 paves the way for rethinking policy.

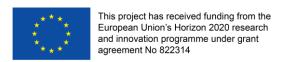
Here, we move from the main categorisations at European level and a reworking of the basic concepts for the development of a new taxonomy. Then we identify new approaches to quantitative data within an overall reconceptualization of inclusive and sustainable creative economies. According to the DISCE's findings, this report (D2.3) provides a set of clear, targeted policy recommendations. Specifically, the D2.3 proposes:

### 1. Harmonized System of National Observatories

To improve the mapping of the multifaceted CCIs reality, especially accounting for specific national characteristics, due to specific policy interventions, fiscal regimes and legislation dedicated to non-for-profit actors. To foster synergies across national statistic offices focused on cultural mapping and the European necessity to improve the quality and the harmonization of cultural statistics.

#### 2. European Survey

To account for relevant features that are not covered by administrative data, such as non-for-profit and charities activities and workforce, elements regarding inclusiveness and sustainability. This survey should be designed at the European level to be then carried out at national level





### 3. Urban laboratory on several pilot cities

To have a specific tool for the cultural ecosystem of urban settings, characterized by dense social networks, creative networks, multi-partner activities that need to be monitored moving beyond narrow dichotomies such as for-profit and not-for-profit, digital and analogue or heritage and contemporary creation.



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### 1. Statistical analyses and mapping of CCIs: from definition to classification

In the last twenty years, significant efforts have been made to fully comprehend the value of CCIs and their contribution to the European creative economy and knowledge society. Despite these efforts, the economic and social value of the CCIs remains largely underestimated due to the sector's peculiarities specificities. Mapping tools, taxonomies, and statistical tools hardly capture with difficulty the CCIs contribution to innovation, social capital, and the creative economy.

Outlining the delineation of the field of investigation is a problematic not an easy task. Firstly, because culture and creativity are two distinct and interconnected concepts, which are not easy to define and describe. Equally complex is their association terms such as sector, industry, product, supply chain. Secondly, because cultural and creative sectors are seen as representative of a national cultural policy that is "State-specific". In that way, definitions are often charged with political meaning and internationally agreed definitions and standardised measurements of the CCIs are not harmonized.

Since culture produces value that sets the objectives of the institutions that articulate and govern the way we perceive the world, there are many definitions of CCIs. Some of the most representative approaches are the "British Creative Industries" in which creativity is placed at the heart of production processes, and which considers the products as intellectual property; the "French Cultural Industries" based on the content industry, mass reproduction and copyrights; the "Scandinavian approach", with the broader term of experience economy that embraces creative industries as well cultural institutions, events, theme parks, sport, and tourism sectors.

Quoting the EU standpoint, the Commission Green Paper (EU, 2010: 5) defines the CCIs as follows:

"'Cultural industries' are those industries producing and distributing goods or services which at the time they are developed are considered to have a specific attribute, use or purpose which embodies or conveys cultural expressions, irrespective of the commercial value they may have. Besides the traditional arts sectors (performing arts, visual arts, cultural heritage – including the public sector), they include film, DVD and video, television and radio, video games, new media, music, books and press. This concept is defined in relation to cultural expressions in the context of the 2005 UNESCO Convention on the protection and promotion of the diversity of cultural expressions. 'Creative industries' are those industries which use culture as an input and have a cultural dimension, although their outputs are mainly functional. They include architecture and design, which integrate creative elements into wider processes, as well as subsectors such as graphic design, fashion design or advertising".

Over the last 20 years, the discourse has also become polarised around the definition of creative industries. Here we quote the most usually definitions provided by the British Department of Culture Media and Sports (DCMS), the United Nations Conference for Trade and Development (UNCTAD), and the European Union authorities (European Commission, European Parliament):

1. The DCMS (2001: 5) refers to "industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property". Creative industries are signs of the natural evolution of the cultural industry





that follow the structural changes caused by the affirmation of new technologies and new products in the sphere of the entertainment industry.

- 2. UNCTAD (2008: 4) defines creative industries as "cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs; constitute a set of knowledge-based activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property rights; comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives; are at the cross-road among the artisan, services and industrial sectors; and constitute a new dynamic sector in the world trade". The term "creative industries" exceeds the limits of the cultural sector to include media and ICTs following the structural changes due to the growth and development of the new technologies.
- 3. For the European Parliament (2016: 10) they are defined as "those industries that are based on cultural values, cultural diversity, individual and/or collective creativity, skills and talent with the potential to generate innovation, wealth and jobs through the creation of social and economic value, in particular from intellectual property".

This polarisation, the interchangeably of the terms "cultural industries" and "creative industries", as well as the long debate on the definition of CCIs, has led to conceptual confusion. This is confirmed by absence of an official and universally agreed definition of the CCIs. Indeed, a significant definitional debate has been developed about the CCIs, and over the past twenty years, a plethora of closely related terms have been adopted. These include the culture industry, the cultural industries, the creative industries, cultural-products industries, the creative economy, and the cultural economy, together forming an imprecise muddle (Boggs, 2009).

Nevertheless, it is crucial to classify, i.e., to identify which activities are deemed part of the CCIs and to establish a baseline to perform quantitative analyses for:

- 1. the design and implementation of policies;
- 2. the international comparisons among national policies.

By moving from these two goals, this report recognises the relevance of classifying rather than defining CCIs. A practical approach based on clear and quantifiable concepts that can lead to consensus at the EU level. In the same token, this section of the D2.3 reflects on classificatory criteria for drawing the sectoral boundaries of a magmatic and evolving space i.e., the complex interactions between knowledge, culture, economics, and technology.

The challenges, here, are to classify CCIs to choose which domains could be considered in a referenced taxonomy. Even though the European Commission has provided a definition of the Creative and Cultural Industries and the sector has been sized (EC, 2010a; 2012), within the DISCE project there is an explicit recognition of the need to advance towards "a comprehensive understanding of CCIs, improving indicators at national and at EU level" (H2020 Work Programme 2018-2020). Developing conceptually and empirically robust mapping of the CCIs is the goal for those seeking to develop a comprehensive policy scheme to support a sustainable and inclusive creative economy. The plurality of models and definitions of the creative economy is an important starting point for DISCE to set what constitutes the spectrum of domains or activities of the CCIs as a Macro sector.

International literature provides a wide range of approaches to mapping the CCIs, which differ in definition and scope. Each methodology proposes a different classification of what are the sectors, sub-sectors, and





activities to be considered as part of the cultural and creative economy, using different types of inclusion or exclusion parameters. Some approaches, for instance, employ a more strictly economic criterion; some classify the cultural and creative sector using copyright as a strictly inclusive, or exclusive, parameter, others talk about experience; some consider sport, nature and tourism, others do not consider any of these.

The most recognized classification systems for CCIs are:

- 1. **DCMS Model** (DCMS, 1998) based on activities requiring creativity, skill and talent, with potential for wealth and job creation through exploitation of their intellectual property.
- 2. **Symbolic Texts Model** (Hesmondhalgh, 2007) based on industries concerned with industrial production and dissemination of symbolic texts.
- 3. The **Concentric Circles Model** (Throsby, 2008) based on the origin and the diffusion of creative ideas in sound, text and image from core creative arts.
- 4. The **WIPO Copyright Model** (WIPO, 2003) based on industries involved directly or indirectly in the creation, manufacture, production, broadcast, and distribution of copyrighted works.
- 5. The **UNESCO Institute for Statistic Model** (UNESCO, 2005) based on cultural goods and services entering international trade.
- 6. The Americans for the Arts Model (Americans for the Arts, 2005) based on businesses involved with the production or distribution of the arts ("arts-centric businesses").
- 7. The **KEA Model** (KEA, 2006) based on clear distinction between cultural and creative industries due to the production process
- 8. The **Creative Trident Model** (NESTA, 2006) based on employment-based classification, and its rationale is that it considers the activities which are part of creative occupations for the production of cultural and non-cultural goods and services.

In the international debate on CCIs, the deliverables D2.1 (Crociata and Pica, 2022) of DISCE's WP2 faces the fragmentation of the definitions in the approaches used as well as the different taxonomies that each of them carries out. D2.1 summarises the current state of knowledge on the CCIs in the EU and proposes a first taxonomy suitable of being operationalized statistically. In that light, by moving from a critical review of the most widely used approaches, DISCE moves from the UNCATC/UNESCO 2008 classification and framework which categorise the creative industries across four groups:

- 1. Heritage (including cultural sites and traditional cultural expressions);
- 2. Arts (including performing and visual arts);
- 3. Media (including publishing and audio-visuals);
- 4. Functional creations (including new media, design, and creative services).

Such a methodological proposal is the precondition for understanding of the inclusive and sustainable development of Creative Economies in Europe. By moving from such classification, DISCE proposes a new classification of CCIs to operationalise statistically two categories (i.e., inclusivity and sustainability) that show a huge extension of meaning. It combines the above-mentioned classification structure with the one identified by Santagata in 2009. This is crucial in opening the debate on culture as tangible and intangible. So, the perimeter of the new classification of CCIs is articulated in three pillars - cultural heritage, tangible culture, media and new media. It includes and extends the 4 macro areas (namely Heritage, Arts, Functional creations, Media) to 5 macro areas adding the Tangible culture section. It allows the rationalization of the sectors in a more coherent way showing how the connection with other sectors represents an important contribution to the economy.



The new CCIs taxonomy extends the areas adding the 'tangible culture' sector and some professions specifically related to the heritage area which have become more and more relevant in the past two decades (Pica, 2012). By doing this the new taxonomy does reconsider the connections among the sectors:

- **Heritage:** GLAM (Galleries, Libraries, Archives, Museums), heritage sites, architecture, botanical gardens
- **Tangible culture:** visual arts (including painting, sculpture and photography), arts and crafts, fashion, design and graphics
- Media: cinema, tv and radio, publishing, audio-visual production, press
- Performing Arts: including opera, theatre, and dance, music industry, festivals
- Functional creations and new media: software, computer games, multimedia, digitalised creative content, advertising and social media

Moreover, the proposed taxonomy includes the cultural educational activities as a as transversal domain, that embrace all the sectors that compose the CCIs system. Here cultural educational activities are seen as a key to foster sustainability in terms of heritage knowledge and comprehension enabling processes of conservation and tuition (EU, 2012). In the same token cultural educational activities are at the basis of the multicultural inclusion, improving mutual, merging the key elements of the DISCE project.

The consequent new taxonomy proposed have important implications not only on the research process itself, but also in terms of achieving a minimum set of domains to go beyond the pure economic assessment of CCIs and achieve a clear ontological base to assess the impact of CCIs in term of inclusive and sustainable creative economy in Europe.



### 2. Statistical analyses and mapping of CCIs: from classification to operationalization.

This heterogeneity of classification methodologies, criteria and definitions makes the work complex, which is also reflected in the development of economic statistics, both in the difficulty of finding data and analysing them. As a matter of fact, the European Union still has an incomplete picture of the contribution of CCIs to economic and social achievement. Eurostat sources of data are fuelled by Member States that are the main actors of the development of the cultural statistics. As above-mentioned, the political and "state-specific" representation of national culture and so of the CCIs boundaries undermine a clear and harmonised picture.

There is a wide acknowledgement on the potential of the CCIs. It is both direct, in the form of the wealth it contributes to GDP and the jobs it generates, and indirect, in the form of positive externalities benefiting other economic sectors and the territory, as its well-being and social development. Operationalising CCIs is the first step to unlock the potential of a development model boosted by culture and creativity. Operationalising means moving from a conceptual level to a measurable empirical level, transforming concepts, applying them to concrete objects and thus to units of analysis. It is necessary to clarify measurement approaches for mapping the contribution of CCIs. From classification to operationalisation means the setting up of analytical methods, practices, and tools for collecting, calculating, information and data on the socioeconomic contribution of cultural industries. In that way, mapping studies could be valuable tools for policymakers even because of they could be used to construct an evidence base to inform government investment.

The UNESCO Institute for Statistics (UIS, 2009) divides the methodological approaches in two lines:

- A. The measure of economic contribution of cultural industries.
- B. The measure impact of cultural industries (multiplier analysis, production function, disequilibrium model).

The first line (A) of analysis, on economic size and structure of CCIs, provides a more general picture of the role that CCIs play in the economics system. The direct contribution is measured accounting for the basic macroeconomic aggregates (GVA, GDP, gross value of production, employment, fixed capital formation, export and import), several of which are operationalized in D2.2 while others are approached in terms of suggestions for collections of new statistics since data are not currently available. Short-term measurement is also present and is based on the evaluation of structural business measures (turnover, sales revenue, number of enterprises, profit, etc.). Value chain analysis, and cluster analysis are example of structural analysis present in this group. An overview of the basic models of the measures for economic size and structural analysis are shown in the Table 1.



Table 1. Basic model of the measures for economic size and structural analysis

Indicator	Measure	Description
Gross value added	Gross value added/GDP of cultural industries or sub-sectors	Gross value added/GDP of cultural industries or sub-sectors in absolute terms
	Gross value added/GDP of cultural industries in relative terms	Share of cultural industries gross value added/GDP in GVA/GDP of total economy (%)
	Distribution of gross value added/GDP by sub-sectors	Share of cultural industries sub-sectors in total gross value added/GDP of cultural industries in absolute and relative terms
Employment	Contribution of cultural industries employment to total employment	Share of cultural industries employees in total employment (%)
	Distribution of employment in cultural industries sub-sectors	Share of cultural industries sub-sectors employment in total employment in cultural industries in absolute and relative terms
	Volume and share of self-employment	Number of self-employment jobs/share of self-employment in total self-employment jobs in economy
	Labour productivity in cultural industries	GVA in cultural industries per employee
Business activity	Stock of businesses	Number of businesses by size in cultural industries
	Distribution of businesses by sub-sector	Number of businesses by size in cultural industries sub-sectors
	Business-start ups	Number of new businesses in cultural industries per 10,000 persons
	Business mortality	Number of closed businesses in cultural industries per 10,000 people
	Distribution of start-up businesses by sub-sector	Number of new businesses in cultural industries sub-sectors per 10,000 persons
	Distribution of business mortality	Number of closed businesses in cultural industries sub-sectors per 10,000 persons

Source: UIS (2009:22)

Within this group of methodologies, the Cultural Satellite Accounts (CSA) is a statistical framework created for measuring the economic contribution of a specific cultural and creative industry. It is based on the Satellite Account System (SAS) and it integrates the demand side with supply side of the cultural economy. The main CSA variables are based on an input-output matrix prepared for the System of National Accounts (SNA).

According to OECD Report (2007:19) "International measurement of economic and social importance of culture": satellite account for the culture sector involves a wide range of data, including:

- Data in the form of current and constant value, quantity, incidence rate, index, and other statistics
- Data to describe various dimensions of culture activity for example, cultural, economic, financial, social, demographic, and other information
- Data relating to all facets of culture for example, the consumers, the producers, the inputs, the outputs, and the activities of support organizations (such as government)
- Data on the factors affecting supply, and the factors affecting demand for culture goods and services.



The main objectives of a Culture Satellite Account include:

- Delineation of the statistical tracking system needed to monitor culture policy and industry issues
- Standardization of concepts, methodologies, and definitions to ensure consistency in data
- Fostering the reconciliation of the different data sources (i.e., reconcile and balance demand and supply data)
- Reconciliation of culture data with core national accounts data
- Identification the interrelationships which exist in the culture area and that should be observed when collecting and ordering data and assessing data quality
- Highlighting of areas requiring data development to remedy critical data inconsistencies or fill data gaps.

The most important contribute of the CSA a satellite account is its ability to systematize a large array of statistics, (social, demographic, economic, financial and cultural), which makes it possible to use CSA not only for measuring the economic contribution of cultural industries, but also for analysing culture phenomena in the broad sense. Data pertaining to several dimensions of all activities (culture and non-culture) in an economy could be organized and interrelated. The criticisms of such an approach derive from the fact that the SNA relies on market price aggregates to assess social value and is focused on the macro economy. Moreover, quoting OECD (2007: 22): "With the increasing interest in the more social impacts of the culture sector, something that is mostly beyond the analytical capabilities of a satellite account, any decision to produce a culture satellite account needs a serious cost-benefit analysis. Although it is possible to incorporate non-monetary variables into the satellite account, they will always be related back to an economic base. Perhaps this combination of high costs and the limitations on the ability to measure true social impacts are among the reasons why few countries have implemented such accounts".

Moreover, CSA suffers from the problems associated with using a standard statistical approach for culture such as difficulty to include the volunteers whose efforts are normally not directly valued, or the fact that and many culturally significant activities may exist only in isolated and relatively small pockets and traditional sampling approaches to gathering data may not provide true estimates of the whole of the activity in question.

The second line (B) of analysis, measures the impact of CCIs by moving from the multiplier effect. The basic framework adopted is the Input-Output (I-O) models able to capture the economic interrelationships between cultural industries (producing sector) and the other sectors of the economy (consuming sectors). In the I-O model dedicated to cultural industries, it is usually possible for indirect impact and induced impact. The direct economic impact is employment and income generated by the cultural industries themselves. The indirect impact comprises all the upstream goods and services that need to be produced to support direct inputs. The induced impact is the change in consumer spending that is generated by changes in labour income because of the common impact (direct and indirect) of cultural industries (UIS, 2009:24).



Table 2. Basic model of multiplier coefficients for cultural industries (CI)

Coefficient	Measure	Description
Output multiplier	Ratio of change in output/production of all industries caused by €1 increase of CI output/production	The relationship between the initial increase in output/production required from CI and the total increase in output by all industries (in monetary unit)
Employment multiplier	Number of full-time equivalent (FTE)persons employed in overall economy due to CI output (per €1 million)	The number of extra persons employed (full-time equivalent) for an initial expenditure of output from Cl(in number of persons)
Gross value added multiplier	Ratio of change in gross value added of all industries caused by €1 increase of CI gross value added	The relationship between the initial increase in output gross value from CI and the total increase in gross value added by all industries(in monetary unit)
Tax revenue multiplier	Ratio of change in tax revenue of all industries caused by €1 increase of CI spending	The relationship between CI consumption and new tax revenues

Source: UIS (2009:24)

Broadening the perspective on statistical mapping about CCIs from the specific tasks of D2.1 and D.2.2, other approaches are worth mentioning. More into details, two other "pure economic model" for CCIs are 1) the Cobb-Douglas production function as a model for explaining more clearly the quantitative relationships between production results and production factors in certain cultural industries domains, and 2) the disequilibrium economic models for testing, measuring and quantifying the effects of allocation decisions at the macro-economic level.

Both Cobb-Douglas and Disequilibrium economic models had a limited impact on the evaluation studies for culture due to the assumptions at the basis of the 1) that is that the output elasticity of labour and capital are constants over time and determined by available technology and of 2) that is a part of economic growth can be attributed to the reallocation of resources from less productive sectors to more efficient sectors.

As a matter of fact, the two main lines of methodological approaches (the economic contribution of CCIs and the impact of CCIs) depend on the quality of statistical data. If the quality of data is poor, most likely mislead will be the results that can be biased by underestimation or overestimation errors.

It is crucial to find a way to assess its quality of data. For instance, UNCTAD (2005) has identified five criteria for assessing the quality of data and information that provides a useful framework of indicators to be used by the research team. They are: - reliability - comparability - usefulness - comprehensiveness and - timeliness.

According to UNESCO (2009:2) the challenges to mapping the cultural sector are:

- scarce and unreliable data on the culture sector;
- weak institutional capacity;
- limited cooperation between different institutions and sectors that inhibits a transversal approach to collecting data and information;
- difficulty of accessing quantitative information and assessing/evaluating the validity of information collected;
- difficulties in bringing stakeholders together from the culture sector, including civil society and private companies, to participate in the collection of information and data;
- shifting national priorities and fluctuating political will to engage in mapping exercises;
- uncertainty on the extent to which data and information will actually be used;





- insufficient personnel and management capacities to effectively run data systems;
- lack of gendered data

More recently the KEA European Affairs (2015) released a report "Feasibility study on data collection and analysis in the cultural and creative sectors in the EU" with the aim to improve statistics for the cultural and creative sectors (CCS) at the European level. The report provides, once again, that Eurostat still sources show still an incomplete and narrow picture of the contribution of its cultural and creative sectors to economic and social achievement. Namely (KEA 2015:7) the main European statistics challenges are:

- 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 neighbouring 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.

As a matter of fact, very often the statistical analyses and mapping of CCIs during the last two decades has been adopted for pragmatic reasons. "For many, indeed, the introduction of creative industries policy ideas is precisely about emphasising their economic importance" (O'Connor et al., 2009: 84).

For example, the recent project "Mapping and developing cultural and creative industries in Montenegro", supported by the UNESCO International Fund for Cultural Diversity (IFCD) which ended in February 2020, aims to map the CCIs and enhance the entrepreneurial skills among creative professionals.

Mapping the economic effects of the cultural and creative industries in Montenegro includes:

- Estimation of CCI economic contribution in the form of gross value added (GVA) in relation to the GVA
  of Montenegro;
- an assessment of the CCIs contribution to employment and the participation of cultural and creative occupations in total employment;
- estimation of the number of business entities (legal entities and entrepreneurs) in the CCIs;
- an estimate of the total revenues generated by the CCIs and the share of total revenues at the level of Montenegro;
- assessment of foreign trade in cultural services;
- estimating household spending on culture and related activities;
- an estimate of expenditure on cultural activities in the budget.



The DISCE approach aims to collect and systematize information on the role of CCIs in stimulating sustainable and inclusive growth (DISCE, 2019). This approach is well-argued in the Deliverable D2.2 (Denti et al, 2022) where the strategy adopted to operationalise CCIs classification is based on three main steps:

- Firstly, it moves from the NACE2 classification codes of CCIs presented by the UNCTAD report (UNCTAD, 2008), firms' information (both financial and structural), analysed in a ten-year time span to better understand the development of these enterprises over time, in terms of birth and mortality rates, and their role in enhancing local economic development, in terms of growth or decrease of employment rates in the sectors related to cultural and creative economies.
- 2. Secondly, it stresses the new classification proposed in the Deliverable 2.1 (Crociata and Pica, 2022). to have a deeper analysis of sectors' characteristics included in the DISCE WP2 CCI taxonomy. The two classifications, UNCTAD and DISCE, combined in a new taxonomy, pave the way to a comprehensive overview of the creative and cultural scenario at the European level, and filling the gap both from a theoretical and data gap of what is missing so far when defining these industries.
- 3. It calls for a more granular geographical perspective. CCI's impact on socio-economic performance become particularly evident at the local level of analysis (Power and Scott 2004; Pratt 2004; Sacco and Crociata 2013; Yang et al. 2021; Cicerone et al. 2021; Cerisola and Panzera, 2022). The rationale behind the geographical approach is that CCIs productive system is itself historically and spatially conditioned (Santagata, 2002; Camagni et al, 2004; Le Blanc 2010; Lange and Schüßler 2018).



## 3. Statistical analyses and mapping of CCIs: from operationalization to policy recommendations

The collection of information and data through mapping exercises is important for governments in their efforts to design effective policies as well for cultural and creative workers, institutions, and non-governmental associations to become aware of existing frameworks, structures, and funds, to fully engage with audiences and so on.

At statistical level, there are a few comprehensive sources (Eurostat and similar) that rely on data provided by national States, which typically have insufficient means to monitor CCIs, and cannot reach data harmonization because each of them may use different (national) statistical systems. In addition, the categorization is hard as well: relevant sub-sectors may be lost within overly broad categories or put into inadequate categories. The rationale behind a classification should support evidence-based decision making, allow comparisons over time, between policies, countries and regions, social groups, and industries, and contribute to increased transparency and accountability (Eurostat, 2014). The European Commission supports these sectors by building on the work of Eurostat as part of the European Statistical System (ESS)-net Culture. At the same time, however, the EC addresses these issues by stimulating critical reflection towards further harmonisation of taxonomies and statistics on the cultural and creative sectors.

For the purposes of this report there is a fitness with the report "Feasibility study on data collection and analysis in the cultural and creative sectors in the EU (KEA 2015:9), whose main identified shortcomings are:

- Reconsidering CCIs 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).

A good affinity of D2.3 result is highlighted in the action plan based on three scenarios to improve collection, analysis and delivery of data (KEA 2015:11):

- 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 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 DISCE project highlights a need for an inclusive understanding of the CCIs. The issue is to cope with unlocking the potential of CCIs to contribute to a development that could be at the same time sustainable and inclusive going beyond the pure economic assessment. In that sense and by moving from the actual shortcomings of the statistical analysis and mapping of CCIs, two are the main challenges to cope with.

1. Improve the spatial unit of analysis at level NUTS2 as well the (NACE) digit level of data for based on the classical information such as Gross Value Added by Economic Sector, Input-Output tables, European Union Labour Force Survey, Structural Business Statistics (SBS) *et similia*.

This deliverable recognizes the necessity to set up system able to investigate the possibility of spatial (and perhaps trans-boundary) clusters of CCI activities. Further, metrics of CCI employment and business creation will be used to identify regions specialized in cultural and creative activities, using regional indices of sectoral specialization and related diversification. In addition, efforts will be made to trace the "creative spill-overs" that, boosted by the frequent face-to-face interactions and communication in a context rich in human capital, creative capabilities and skills, which highly benefit innovation, diversification and competitiveness of regional systems. Moreover other aspects, should be mapped such as composition of the regional economy (sectors); geographical concentration of CCIs; rural-urban distribution and rural-urban flows and linkages, jobs in arts, culture, entertainment and creative sectors, as well as in high-medium tech sectors, knowledge intensive product/services; intramural R&D expenditure and researchers; regional labour market disparities; regional structure of earnings and productivity; in-coming/out-going commuting employment. This set also includes elements suggesting the degree of innovativeness of the region by recording patent applications to the European Patent Office (EPO) and the International Patent Certification (IPC) with a focus on high-tech patent applications and community designs.

2. Improve the data collection focusing on microdata at the individual-level to provide evidence that a statistically significant relation exists between some forms of cultural consumption and in general the impact of cultural capital on study of wellbeing, creativity, empowerment, and diversity. replicated in different socio-economic contexts, e.g., in other European countries

The main axes of the New European Agenda for Culture, the instrument chosen by the European Community to create a new approach to cultural policies centred on social impact and the ability to respond to the major social challenges of our time. The three axes of the Agenda, social cohesion, health and wellbeing, and innovation (with the probable forthcoming inclusion of sustainable management of climate change), clearly identify some of the central nodes in the agenda. Moreover, a recent stream of cultural economics literature provided empirical evidence of the impact cultural consumptions on variety of different spheres such as, for instance, education and lifelong learning, social regeneration, networking and cohesion, and well-being, with benefits extending beyond the circle of the involved subjects. (Crociata et al., 2015; Grossi et al., 2012; Everingham, 2003; Quaglione et al. 2011; Crociata et al., 2020).

The DISCE project recommends, through the reflections developed within the deliverables D2.1 Current state of knowledge on the CCIs, the D2.2 (Guidelines for operationalising the data) and the D2.3 (Policy recommendations statistical analyses and mapping of CCIs), four lines of targeted policy recommendations.



Specifically, the D2.3 proposes this set of clear, targeted policy recommendations:

#### 1. Harmonized System of National Observatories

The Observatory's mission is to develop a systematic analysis of the productive, cultural, economic and social aspects of heritage and cultural activities, as well as of the creative industries in the territory; this analysis has a twofold purpose: a) to assist and support the national administration in the design and monitoring of intervention tools to support the cultural sector; b) to enable operators in the sector to fully understand the scope of effectiveness and impact of their activities. their activities. Supported by an institutional mandate and shaped by the territorial dimension, the Cultural Observatory is the body able to carry out in-depth analyses thanks to the exchange relationship between local authorities, institutions and enterprises. Its proximity to these realities makes it possible to monitor the effectiveness of the projects implemented on the basis of the results of the research activity. It is therefore a support tool for the planning of cultural policy interventions by the administration at national and regional. The Observatory is a study centre that develops a systematic research activity for the construction of a cognitive framework able to provide the main indicators (consumption, economic and employment resources, cultural production and supply, infrastructures and cultural venues) of the different CCIs sub-sectors both at national and at regional level. Its activities are at the same time at the service of operators, actors, and planners of cultural and territorial services.

#### 2. European Survey

Measures for inclusiveness and sustainability within CCIs could be better captured through a survey designed at the European level and then carried on within each country through national umbrella organizations representing CCIs. Diversity in the workforce, sustainability in the creative and productive process are likely to happen often at a micro-scale within many CCIs actors, hence they cannot be captured through administrative data collection. Through the survey, it would also be possible to capture basic statistics on micro and precarious operators that do not appear in administrative data. Further, it would allow to increase participation, hence aligning to the SDGs on inclusiveness. Overall, it will alleviate some of the measurement bias issues that characterize administrative data on CCIs

#### 3. Cultural and Creative Cities Monitor (CCCM)

The Cultural and Creative Cities Monitor is designed to help national, regional and municipal policy makers in identifying local strengths and opportunities, benchmarking their cities against similar urban centres using both quantitative and qualitative data, and continuing the work led by newly created dataset The Cultural and Creative Cities Monitor is thus an instrument to promote mutual exchange and learning between cities. For researchers, the pool of comparable data is expected to generate new questions and insights into the role of culture and creativity in cities' social and economic wellbeing. The Cultural and Creative Cities Monitor covers 190 cities in 30 European countries (the EU-27 with Norway, Switzerland, and the United Kingdom). The quantitative information is captured in 29 indicators relevant to 9 dimensions reflecting 3 major facets of the cultural, social and economic vitality of cities. The qualitative component includes key facts and manifestations of cities' cultural and creative assets to illustrate and complement the quantitative evidence. These touch on features ranging from the main cultural sites, artistic institutions, or live events to the development of policy strategies and infrastructure (e.g., funds, tax incentives, creative incubators, fab labs) that demonstrate a city's commitment to supporting culture and creativity. So,



more cities should be included into CCCM and more funds should be allocated to CCCM to boost its activity.

### 4. Improving Eurostat statistics

As well debate in D2.2, not all the sectors identified in the DISCE taxonomy are covered by Eurostat data. Moreover, Eurostat statistics cover market-oriented enterprises only. To catch the how inclusivity and sustainability could be achiever in a cultural and creative economy system, Eurostat statistics should cover libraries, archives, museums and other cultural activities, arts, creative and entertainment activities. In the same token Eurostat efforts for an improved way of measuring cultural employment should be further supported to overcome some shortcomings that are still present and that prevents a comprehensive measurement. Having harmonized information across European regions on would broaden the coverage of indicators on new job creation, but also on income generated by CCIs, size of CCIs sectors and CCIs industry diversification (see D2.2 to an exhaustive reflection on Eurostat statistics gap). Due to the relevance of CCIs in achieving a sustainable and inclusive development, more effort and more resources should be allocated in order to put cultural statistics in a better consideration within the general Eurostat statics domain.



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