



MEETING OF CULTURAL MINISTERS

STATISTICS WORKING GROUP

Measuring the economic value of cultural and creative industries—Statistics Working Group of the Meeting of Cultural Ministers

April 2018

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1. Introduction

There has been considerable interest over recent years in quantifying the economic contribution at the national and state and territory levels of the creative and cultural industries.

At the national level, the release in February 2014 of the ABS publication, *Australian National Accounts: Cultural and Creative Activity Satellite Accounts, Experimental 2008–09*, was the most notable. The groundwork was laid by the June 2013 ABS report, *Discussion Paper: Cultural and Creative Activity Satellite Accounts* as part of a Feasibility Study project commissioned by the Statistic Working Group.

The 2014 report estimated the economic contribution to GDP to be in excess of \$86 billion in 2008–09. This estimate was subsequently revised to \$99.6 billion for 2012–13 by the Commonwealth Department of Communications and the Arts unit, the Bureau of Communications Research.

Also at the national level, the Creative Industries Innovation Centre's report, *Valuing Australia's Creative Industries*, estimated the industries' Gross Product to be \$32.7 billion in 2011–12 (based on IBISWorld estimates) and \$45.9 billion (based on ABS 2008–09 national input output tables).

At the state and territory level, New South Wales released *Creative Industries Economic Profile* in June 2013 estimating industry value add of over \$36 billion. Victoria has released two economic analyses. *Economic Impact of Arts and Culture in Victoria*, prepared by KPMG in 2013, estimated a total contribution of \$11.4 billion to the annual Victorian GSP. (This study has been replicated in the ACT and in New South Wales.) The second, *Victoria's Creative and Cultural Economy Fact Pack*, prepared by BCG in 2015, estimated the contribution of the creative and cultural economy to the Victorian economy to be \$22.7 billion.

While these reports have made significant advances in quantifying the economic contributions of the creative and cultural industries, some issues have arisen.

To begin with there is considerable variation in the estimates provided by these reports although they draw on the same ABS data sets, the National Accounts and industry and employment statistics.

Further there is a lack of comparability between the reports and this poses challenges in replicating the studies in future years.

Thirdly, the National Accounts on which the reports are based do not always provide sufficient robust data about the states and territories, limiting reliability in estimating economic value at the sub-national jurisdiction level.

The ABS framework for defining the cultural sector's industry and occupation classifications was developed well before the emergence of the concept of the creative industries. The creative industries are therefore not recognised by the ABS in the same way that the cultural sector is and their component parts are located across a number of ABS classified industries. A large part of the creative industries is located within the traditional cultural classifications with the balance outside the cultural sector.

That being the case, sometimes the terms 'cultural' and 'creative' are incorrectly used interchangeably; the cultural industries are not identical to the creative industries. As the parameters of the creative industries have been identified there has not been uniform or consistent agreement on the components or boundaries or the degree of cross over with the cultural industries.

In Australia, an inherent factor as to why views vary on what to include and what to exclude in defining the industries is that governments at the Commonwealth, state and territory levels do not organise Ministerial portfolios, legislation, agencies and agency responsibilities and policy responsibilities in a consistent or uniform way. Perspectives also change over time as government's continuously change, portfolios and legislative responsibilities are reshuffled and agencies are renamed, restructured and re-clustered.

This paper examines the reports to date, compares their varying scoping and methodologies and makes recommendations for the consideration of the Meeting and Cultural Ministers Officials in order for the Statistics Working Group to continue and progress its valuable work in this area.

2. Executive summary

Cultural and creative industries are increasingly acknowledged as important components and drivers of growth in the modern, knowledge-based economy.

However, the cultural and creative industries are complex to define and the economic value remains difficult to measure—more difficult than many other industries which are more neatly characterised.

There is no universally accepted approach to the analysis and measurement of the economic value of the creative and cultural industries.

2.1 Definitions

The definitions and descriptions of creative and cultural industries sectors and sub-sectors do not align with the definitions used by government statistical agencies, such as the Australia and New Zealand Standard Industry Classification (ANZSIC) used by the Australian Bureau of Statistics.

A major reason for the variations in approaches by government agencies is the diversity in the scope of government jurisdictions across cultural and creative industries. This is reflected in the diversity in arts / cultural / creative industries ministries and government portfolios, their structures and responsibilities.

Adding further complexity is the diversity in methodologies, modelling and scope of economic value and impact estimates adopted by the various organisations undertaking the research.

To date, the ABS Cultural and Creative Activity Satellite Accounts publication of 2014 provides the most comprehensive definition of the cultural and creative industries.

The report included estimates of the value of the cultural and creative industries, the businesses in these industries and employment in cultural and creative occupations based on the 'trident' categories:

- specialist—workers within a cultural or creative occupation within the cultural or creative industries
- support—workers in a non-cultural or non-creative occupation within the cultural or creative industries, and
- embedded—workers in a cultural or creative occupation outside the cultural or creative industries.

Alongside the development of the Satellite Accounts, the ABS has identified a number of industry sectors where there are data gaps and quality issues as well as potential remedies to address these. It is timely for SWG and the ABS to revisit these issues that have been identified.

The Creative Industries Innovation Centre took a very different approach, based on work done by Nesta in the UK, to define creative industries using the concept of creative intensity. Creative intensity of an industry sector is the proportion of total employment within that sector that is engaged in creative occupations. An industry sector was classified as creative if it recorded a creative intensity of at least 30%. The creative industries, defined in accordance with this approach, is significantly different to the creative and the cultural industries used in the ABS Satellite Accounts.

2.2 Measuring economic value

Adding to these variations in the methodologies adopted for defining the industries, there are a number of measures of economic value.

There are two in particular:

1. value add, and
2. number of persons employed.

The first measure of economic value most consistently used has been “value add”. Value add is equivalent to output less goods and services sourced from other suppliers. It aligns with Gross Domestic Product (GDP) and Gross State Product (GSP).

The other measure readily available from ABS sources by broad industry sector, and by jurisdiction, is ‘number of persons employed’.

Both value add and employment meet the requirements of being robust, comparable and relevant.

Other quantifiable measures of value, including indirect value and wider economic value, as well as use / non-use value and market / non-market values, are further measures providing a ‘more complete’ picture. They require additional computer modelling and specialist surveys. Requiring significant additional cost, there may also be issues of reliability and robustness.

The national accounts are the source of economic data for almost all research studies and reports on economic value and impact.

The ability to present timely, regular, robust economic data at an individual state or territory level remains a priority for those jurisdictions.

2.3 Economic value at the state and territory level

Continuing effort is required to address the issue of breaking down the information available from the ABS at a national level to individual state and territory level.

This report has made recommendations for the consideration of the Meeting of Cultural Ministers Officials in three areas: defining the creative and cultural industries; measuring their economic value, and; measuring economic value at the state and territory level.

2.4 Recommendations

1. SWG adopts the National Satellite Account definition as the core creative and cultural Industry definition for all national and sub-national economic assessments.
2. In future work programs, SWG and the ABS further investigate:
 - data gaps and quality issues for a range of industry sectors, identified by the ABS in the 2013 Satellite Account Discussion Paper, detailing and pursuing potential remedies
 - ANZSIC codes determined to be “partially in scope” in the Satellite Accounts for future updates, and
 - refining the scope and definitions used in the Satellite Accounts for future updates including an examination of additional creative industry sectors identified in accordance with the creative intensity analysis.
3. Jurisdictions use *gross value add* and *number of persons employed* as the minimum standard measure.
4. For a more detailed jurisdictional picture, indirect and wider economic value be included where possible and resources permitting, noting that differing methodologies would likely mean that the results would not be readily comparable across jurisdictions.
5. SWG continue to work with the ABS to explore a robust methodology to allocate national economic data relating to the cultural and creative industries across states and territories.

3. Defining the cultural and creative industries

Defining the creative and cultural industries for statistical reporting purposes is not a straightforward task. Sectors within an industry definition may not align with standard ABS industry and occupation classifications.

The distinctions between the creative and cultural industries definitions used in Australian Commonwealth, State and Territory jurisdictions are not consistent. In particular, there is variation in which industry sub-sectors or groups are included as 'cultural' or 'creative'.

In all definitions and models there is a large overlap between the creative and cultural industries.

[Appendix 1](#) provides an illustration of different industry classifications in recent economic impact studies at the national and state levels.

There are three definitions examined in this paper which have emerged through the reports outlined in the Introduction:

- Cultural and Creative Activity Satellite Accounts
- Nesta / Creative Industries Innovation Centre (CIIC)
- Nesta / Queensland University of Technology (QUT).

3.1 Definition #1: Cultural and Creative Activity Satellite Accounts

The 2014 ABS publication, *Australian National Accounts: Cultural and Creative Activity Satellite Accounts, Experimental 2008–09 (ABS 5271.0)*, presents the first comprehensive definition in this country of the creative and cultural industries as well as a measurement of the economic contribution of cultural and creative activity in Australia.

At this point in time the Cultural and Creative Activity Satellite Accounts publication offers the most comprehensive definition of the cultural and creative industries. Based on the ANZSIC Industry and Occupation Codes, it enables estimates of the value of the cultural and creative industries, both individually and combined. However, there is still debate as to how sub-sectors within the creative and cultural industries should be categorised.

The satellite accounts are based on the Australia and New Zealand Standard Industry Classification (ANZSIC) and Australian and New Zealand Standard Occupations (ANZSCO). The cultural and creative industry and occupations in these two broad classifications were developed in consultation with government, industry and academic stakeholders. The parameters were informed by the *National Culture-Leisure Industry Statistical Framework*, developed by the ABS and SWG (then known as the Statistical Advisory Group, SAG, to Cultural Ministers Council) in the late 1980s and early 1990s. The Framework was based on a UNESCO Framework for Cultural Statistics adapted for Australian use following a series of national industry workshops and consultation.

The satellite accounts measure the economic contribution of cultural and creative activity in four components:

- i. activity in the industries which form supply chains for cultural and creative goods and services
- ii. activity in other industries performed by workers in cultural and creative occupations
- iii. volunteer services to arts and heritage organisations, and
- iv. non-market output of market producers in the cultural and/or creative industries—this captures the value of goods and services supplied by non-profit institutions for free, or at prices that are not economically significant, because the production is supported by charitable contributions and other transfers.

The first and second components of the satellite accounts can be compared with Australian national accounts aggregates, such as Gross Domestic Product, as these activities fall within the national accounts production boundary and are measured on a consistent basis. These components have formed the basis for the other studies referred to elsewhere in this report (prepared by KPMG for Victoria, the report for New South Wales, BCG for Victoria, and the Creative Industries Innovation Centre).

The third and fourth components of the satellite accounts are an extension beyond the national accounts production boundary and are therefore not directly comparable with national accounts aggregates. These extensions provide a more complete picture of the value of cultural and creative activity to society than is evident in the estimates on a national accounts basis.

Estimates including these components are described as being on a 'satellite accounts basis'.

Industries covered in the Satellite Accounts are in [Appendix 3](#).

3.1.1 The 'trident' approach

The Satellite Accounts, the New South Wales and the Victorian BCG reports include a creative workforce based on the 'trident' concept.

First developed by the ARC Centre of Excellence for Creative Industries and Innovation at Queensland University of Technology (QUT), and endorsed and applied by Nesta, the noted innovation foundation in the UK, the 'trident' is based on the output of three creative employment categories:

- specialist—workers within a creative occupation within the creative industries
- support—workers in a non-creative occupation within the creative industries, and
- embedded—workers in a creative occupation outside the creative industries.

Examples of specialists include individual, sole-trader artists, such as studio-based visual artists, and creative workers employed in cultural and creative industry organisations, eg, actors and directors working in a film company.

Support worker examples would include accountants and office-workers in major galleries or media companies.

Examples of embedded workers are designers employed in manufacturing or librarians working in universities.

The 'trident' approach is also the basis of considerable cultural and creative industry mapping at a national, state and territory level.

Estimates of employment and business numbers across the trident based on ABS Census data have been used as a basis for modelling the contribution of these industries to the economy at the local level.

3.1.2 State and territory reports—adapting the Satellite Accounts definition

The Satellite Accounts have formed the basis for defining the scope of recent state and territory policies, frameworks and studies of the cultural and creative industries.

At the state level, New South Wales released *NSW Creative Industries Economic Profile*, prepared by the then NSW Trade & Investment, in June 2013.

In Victoria two economic analyses have been undertaken. *Economic Impact of Arts and Culture in Victoria* (prepared by KPMG in 2013), the methodology for which was also used in the ACT and in New South Wales. Most recently, *Victoria's Creative and Cultural Economy Fact Pack* (prepared by BCG in 2015).

These studies have drawn on the Satellite Accounts but have used different definitions of the industries in their scope.

3.2 Definition #2.1: Nesta / Creative Industries Innovation Centre

Building on UK Department of Culture, Media and Sport (DCMS) work and the concept of the trident, Nesta conducted a mapping of the UK's creative industries in 2013. The method focuses on creative intensity, that is, the proportion of total employment within an industry that is engaged in creative occupations.

Nesta developed a definition of a creative occupation and criteria to assess creative occupations based on existing research and their own research.

Nesta defined a creative occupation as a role within the creative process that brings cognitive skills to bear to bring about differentiation to yield either novel or significantly enhanced products whose final form is not fully specified in advance.

Criteria for assessment of occupations as creative are:

- novel process
- mechanisation resistant
- non-repetitiveness of non-uniform function
- creative contribution to the value chain
- interpretation, not mere transformation.

An occupation was required to meet four of these criteria to qualify as creative.

Creative intensity was calculated by Nesta by using the creative occupations identified above to determine the proportion of creatively occupied jobs within each industry of employment.

A threshold for creative industries was determined based on the mean and standard deviation. Industries were classified as creative if they recorded a creative intensity of at least 30%.

The baseline was further refined by removing statistically volatile or unreliable codes to ensure a statistically resilient baseline estimate for creative employment.

The Creative Industries Innovation Centre (CIIC), in association with SGS Economics and Planning, has adopted the intensity measure developed by Nesta and applied the methodology to the Australian creative sector.

[Appendix 2](#) details the Australian industry sectors, by ANZSIC codes, determined to be creative using the Nesta/CIIC creative intensity analysis.

3.3 Definition #2.2: Nesta / Queensland University of Technology

A further refinement of the creative intensity methodology has been undertaken by the Creative Industries Faculty of Queensland University of Technology (QUT). The QUT paper outlines that the occupation classification (ANZSIC) used by the ABS in Australia is of a higher level of detail than that used in the UK. As a consequence, QUT argues that the use of a 20% intensity threshold in Australia provides a tighter, more focussed selection of creative industries improving the ability to understand and measure creative employment in Australia.

The Nesta/CIIC analysis is publicly available; the QUT paper is available only on request. The following analysis is based on the Nesta/CIIC methodology with reference made where the QUT methodology would produce a varying result.

[Appendix 3](#) details the Australian industry sectors, by ANZSIC codes, determined to be creative using the Nesta/QUT creative intensity analysis.

3.4 Comparison of cultural / creative industry definitions

Summary comparison of approaches

The following table is a summary of the ANZSIC codes included in the three main methodologies for defining the cultural and creative industries, the:

1. ANZSIC codes classified as cultural and / or creative in the ABS Satellite Accounts
2. ANZSIC codes which satisfy the Nesta / CIIC creativity intensity threshold of 30%
3. ANZSIC codes which satisfy the Nesta / QUT creativity intensity threshold of 20%.

To assist in reading this detailed table, immediately following the table ANZSIC codes are presented in further tables in groups sharing cultural and creative classifications.

Summary of the ANZSIC codes included in the three main methodologies for defining the cultural and creative industries

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Museums	Museum operation (8910)	✓	✓		✓
Environmental heritage (zoos, botanical gardens)	Zoos, botanical gardens, nature reserves, conservation parks operation (8921, 8922)	✓			
Libraries and archives	Libraries and archives (6010)	✓	✓		✓
Literature and print media	Printing (1611)	✓			
Literature and print media	Printing support services (1612)		✓	✓	✓
Literature and print media	Book and magazine wholesaling (3735)	✓			
Literature and print media	Newspaper and book retailing (4244)	✓			
Literature and print media	Publishing (except internet and music publishing) nfd (5400)			✓	✓
Literature and print media	Newspaper, periodical, book and directory publishing nfd (5410)			✓	✓
Literature and print media	Newspaper publishing (5411)	✓	✓	✓	✓
Literature and print media	Magazine and other periodical publishing (5412)	✓	✓	✓	✓

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Literature and print media	Book publishing (5413)	✓	✓	✓	✓
Literature and print media	Directory and mailing list publishing (5414)				
Literature and print media	Other publishing (not software, music and internet) (5419)		✓		✓
Performing arts	Creative and performing arts activities, nfd (9000)			✓	✓
Performing arts	Performing arts operation (9001)	✓	✓	✓	✓
Performing arts	Creative artists, musicians, writers and performers (9002)	✓	✓	✓	✓
Performing arts	Performing arts venue operation (9003)	✓	✓		✓
Architecture	Architectural services (6921)	✓	✓	✓	✓
Advertising	Advertising services (6940)	✓	✓	✓	✓
Design	Other specialised design services (6924)	✓	✓	✓	✓
Design	Computer system design and related services (7000)		✓	✓	✓
Broadcasting, electronic or digital media and film	Software publishing (5420)		✓	✓	✓
Broadcasting, electronic or digital media and film	Motion picture and sound recording, nfd (5500)			✓	✓
Broadcasting, electronic or digital media and film	Motion picture and video activities, nfd (5510)			✓	✓
Broadcasting, electronic or digital media and film	Motion picture and video production (5511)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Motion picture and video distribution (5512)	✓	✓		

		Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
Industry domain	Sector (ANZSIC code)	Cultural	Creative	Creative	Creative
Broadcasting, electronic or digital media and film	Motion picture exhibition (5513)	✓	✓		
Broadcasting, electronic or digital media and film	Post production services and other motion picture and video activities (5514)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Broadcasting (except internet), nfd (5600)			✓	✓
Broadcasting, electronic or digital media and film	Radio broadcasting (5610)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Television broadcasting, nfd (5620)			✓	✓
Broadcasting, electronic or digital media and film	Free-to-air television broadcasting (5621)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Cable and other subscription broadcasting (5622)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Internet publishing and broadcasting (5700)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Internet Service Providers, Web Search Portals and Data Processing Services (5900)				✓
Broadcasting, electronic or digital media and film	Video and other electronic media rental and hiring (6632)	✓			
Broadcasting, electronic or digital media and film	Information Media and Telecommunications, nfd (J000)				✓
Music composition and publishing	Sound recording and Music Publishing (5520)		✓		✓
Music composition and publishing	Music publishing (5521)	✓	✓		✓
Music composition and publishing	Music and other sound recording activities (5522)	✓	✓		✓

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Visual arts and crafts	Jewellery and silverware manufacturing (2591)	✓	✓	✓	✓
Visual arts and crafts	Jewellery and watch wholesaling (3732)	✓	✓		
Visual arts and crafts	Watch and jewellery retailing (4253)	✓	✓		
Visual arts and crafts	Professional photographic services (6991)	✓	✓	✓	✓
Fashion	Clothing manufacture (1351)		✓		
Fashion	Footwear manufacture (1352)		✓		
Fashion	Clothing and footwear wholesaling (3712)		✓		
Fashion	Clothing and footwear retailing (4251, 4252)		✓		
Other	Entertainment media retailing (4242)	✓			
Other	Arts education (8212)	✓			
Other	Arts and Recreation Services, nfd (R000)				✓

The following table is a broad summary of the significant differences in inclusions in the above studies.

For codes chosen by jurisdictions, and referred to above, in recently completed studies, refer to [Appendix 1](#). See [Appendix 2](#) for details on the Nesta / CIIC creativity intensity calculations; and see [Appendix 3](#) for details on the Nesta / QUT creativity intensity calculations. [Appendix 4](#) lists the ANZSIC codes classified as cultural and / or creative in the ABS Satellite Accounts.

The following sections and tables present ANZSIC codes in groups sharing cultural and creative classifications.

ANZSIC codes—included as cultural and / or creative in the Satellite Accounts and in both the Nesta / CIIC and the Nesta / QUT studies

ANZSIC codes designated cultural and / or creative in the ABS Satellite Accounts and creative using the NESTA / CIIC creative intensity methodology

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Literature and print media	Printing support services (1612)		✓	✓	✓
Literature and print media	Newspaper publishing (5411)	✓	✓	✓	✓
Literature and print media	Magazine and other periodical publishing (5412)	✓	✓	✓	✓
Literature and print media	Book publishing (5413)	✓	✓	✓	✓
Performing arts	Performing arts operation (9001)	✓	✓	✓	✓
Performing arts	Creative artists, musicians, writers and performers (9002)	✓	✓	✓	✓
Performing arts		✓	✓	✓	✓
Performing arts		✓	✓	✓	✓
Architecture	Architectural services (6921)	✓	✓	✓	✓
Advertising	Advertising services (6940)	✓	✓	✓	✓
Design	Other specialised design services (6924)	✓	✓	✓	✓
Design	Computer system design and related services (7000)		✓	✓	✓
Broadcasting, electronic or digital media and film	Software publishing (5420)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Motion picture and video production (5511)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Post production services and other motion picture and video activities (5514)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Radio broadcasting (5610)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Free-to-air television broadcasting (5621)	✓	✓	✓	✓

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Broadcasting, electronic or digital media and film	Cable and other subscription broadcasting (5622)	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Internet publishing and broadcasting (5700)	✓	✓	✓	✓
Visual arts and crafts	Jewellery and silverware manufacturing (2591)	✓	✓	✓	✓
Visual arts and crafts	Professional photographic services (6991)	✓	✓	✓	✓

ANZSIC codes—included as cultural and / or creative in the Satellite Accounts and in the Nesta / CIIC study but not in the Nesta / QUT study

There were nil ANZSIC codes designated cultural and / or creative in the ABS Satellite Accounts and creative using the NESTA / CIIC creative intensity methodology but designated not creative in the Nesta / QUT methodology.

ANZSIC codes—included as cultural and / or creative in the Satellite Accounts and in the Nesta / QUT study but not in the Nesta / CIIC study

There were nil ANZSIC codes designated cultural and / or creative in the ABS Satellite Accounts and creative using the NESTA / QUT creative intensity methodology but designated not creative in the Nesta / CIIC methodology.

ANZSIC codes—included as cultural and / or creative in the Satellite Accounts and both studies

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Museums	Museums Operation (8910)	✓	✓		✓
Libraries and archives	Libraries and archives (6010)	✓	✓		✓
Literature and print media	Other publishing (not software, music and internet) (5419)		✓		✓
Performing arts	Performing arts venue operation (9003)	✓	✓		✓
Music composition and publishing	Sound recording and music publishing (5520)		✓		✓
Music composition and publishing	Music and other sound recording activities (5522)	✓	✓		✓

ANZSIC codes included in cultural industries but excluded from both the Nesta / CIIC and the Nesta / QUT creative industries

Codes “wholly in scope” in the Satellite Accounts

The domain has a creative intensity score of 20% which meets the QUT threshold but not the CIIC 30% threshold.

Support services (arts education) include private drama, dance, art and music teaching.

ANZSIC code included under the ABS Satellite Accounts but is excluded from both definitions

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Other	Arts education (8212)	✓			

Codes “partially in scope” in the Satellite Accounts.

Retailing and wholesaling domains recorded low creative intensity scores and were hence excluded by Nesta / CIIC. These domains were characterised in the Satellite Accounts as “partially in scope” indicating that they cover a range of activities only some of which are cultural / creative.

Retailing and wholesaling domains excluded by Nesta / CIIC

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Literature and print media	Printing (1611)	✓			
Literature and print media	Book and magazine wholesaling (3735)	✓			
Literature and print media	Newspaper and book retailing (4244)	✓			
Broadcasting, electronic or digital media and film	Motion picture and video distribution (5512)	✓	✓		
Broadcasting, electronic or digital media and film	Motion picture exhibition (5513)	✓	✓		
Broadcasting, electronic or digital media and film	Video and other electronic media rental and hiring (6632)	✓			
Music composition and publishing	Music publishing (5521)	✓	✓		

		Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
Industry domain	Sector (ANZSIC code)	Cultural	Creative	Creative	Creative
Visual arts and crafts	Jewellery and watch wholesaling (3732)	✓	✓		
Visual arts and crafts	Watch and jewellery retailing (4253)	✓	✓		
Fashion	Clothing manufacture (1351)		✓		
Fashion	Footwear manufacture (1352)		✓		
Fashion	Clothing and footwear wholesaling (3712)		✓		
Fashion	Clothing and footwear retailing (4251, 4252)		✓		
Other culture goods manufacturing and sales	Entertainment media retailing (4242)	✓			

Domain / ANZSIC codes included in the Satellite Accounts but excluded from cultural and creative industries reports

Domain excluded from cultural and creative value reports because outside the scope of jurisdiction portfolios

The environmental heritage domain is included in the ABS Satellite Accounts as a cultural domain consistent with UNESCO and international definitions of the cultural industry. Virtually all creative ministry jurisdictions either exclude this domain, or quote a total value with it excluded, in reports on economic value of the cultural / creative industries.

Environmental heritage domain included in ABS Satellite Accounts

		Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
Industry domain	Sector (ANZSIC code)	Cultural	Creative	Creative	Creative
Environmental heritage (zoos, botanical gardens)	Zoos, botanical gardens, nature reserves, conservation parks operation (8921, 8922)	✓			

ANZSIC codes included as creative in the Nesta / CIIC and / or the Nesta / QUT analyses but not included in the Satellite Accounts

The following codes scored creative intensities greater than 30% and hence were included in the Nesta / CIIC analysis but were excluded from the Satellite Accounts.

Codes scoring creative intensities greater than 30%

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Literature and print media	Publishing (except internet & music publishing, nfd (5400)			✓	✓
Literature and print media	Newspaper, periodical, book and directory publishing, nfd (5410)			✓	✓
Performing arts	Creative and performing arts activities, nfd (9000)			✓	✓
Literature and print media	Publishing (except internet & music publishing, nfd (5400)			✓	✓
Literature and print media	Newspaper, periodical, book and directory publishing, nfd (5410)			✓	✓
Broadcasting, electronic or digital media and film	Motion picture and sound recording, nfd (5500)			✓	✓
Broadcasting, electronic or digital media and film	Motion picture and video activities, nfd (5510)			✓	✓
Broadcasting, electronic or digital media and film	Broadcasting (except internet), nfd (5600)			✓	✓
Broadcasting, electronic or digital media and film	Television broadcasting, nfd (5620)			✓	✓
Broadcasting, electronic or digital media and film	Internet service providers, web search portals and data processing services (5900)				✓
Broadcasting, electronic or digital media and film	Information media and telecommunications, nfd (J000)				✓
Other	Arts and recreation services, nfd (R000)				✓

Satellite Accounts domains not in scope for Nesta / CIIC and Nesta / QUT

The following “domains”, not industry domains but activities that cut across many domains, were included in the ABS Satellite Accounts as an extension beyond the national accounts. These activities fall outside the scope of both the Nesta / CIIC and Nesta / QUT research methodology.

Domains included in the ABS Satellite Accounts as an extension beyond the national accounts

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Creative
Volunteer services	n.a.	✓	✓		
Non-market output	n.a.	✓	✓		

3.5 ANZSIC industry codes partially in scope

Many ANZSIC industry codes do not align conveniently with the industry domains.

[Appendix 3](#) is a listing of the four-digit ANZSIC codes which were included in the ABS Satellite Accounts report prepared from the 2008–09 national accounts. Those codes which are described as “partially in scope” included ‘non-cultural and / or non-creative’ activities and outputs.

Example of ANZSIC code which is “partially in scope”: Division G Retail Trade Class 4279, Other Store-Based Retailing n.e.c

An example which strongly illustrates the difficulty in separating cultural / creative industries from a broad ANZSIC is in retailing.

Activities included under this class are (with cultural / creative highlighted):

- **art gallery operation (retail)**
- binocular retailing
- bottled liquefied petroleum gas (LPG) retailing
- briquette retailing
- clock retailing
- coal retailing
- coke retailing
- computer consumables (toners, inks) retailing
- **craft goods retailing**
- duty free store operation
- firewood retailing
- firework retailing
- greeting card retailing
- ice retailing
- map retailing
- **musical instrument retailing**
- pet and pet accessory retailing
- **photographic chemical retailing**
- **photographic film or paper retailing**
- pram retailing
- religious goods (except books) retailing

- specialty stores n.e.c.
- store-based retailing n.e.c.
- swimming pool retailing
- tobacco product retailing
- variety store operation.

An industry sector can be excluded from an estimate of economic value, due to the breadth and significance of ‘non-cultural / non-creative’ activities covered by that sector. However, some of the activity will still be captured of the employment of people with cultural and creative occupations in that sector through the ‘trident’ approach.

Example of inclusion of activity from a “partially in scope” ANZSIC code as a result of the ‘trident’ approach: Division G Retail Trade Class 4279, Other Store-Based Retailing n.e.c

Other Store-Based Retailing (ANZSIC Code 4279) is generally excluded, as an industry class, from economic studies as a ‘non-cultural / non-creative’ industry. Under the ‘trident’ approach, workers with creative occupations within this industry will be included—both in jobs numbers in employment and in earnings of those jobs in economic value.

For example, the earnings of all persons employed in this industry class with the following creative occupations (ANZSCO indicated in parentheses) would be included in the total economic value of the cultural / creative industries using the ‘trident’ approach:

- Arts Administrator or manager (139911)
- Antique dealer (142112)
- Gallery or museum curator (224212)
- Marketing specialist (225113)
- Gallery or museum technician (399311)
- Visual merchandiser (639511).

Further investigation by SWG and the ABS on these “partially in scope” codes could significantly improve the coverage and accuracy of future Satellite Accounts work and economic studies and reports, all of which are based on the ANZSIC classification.

In the Satellite Account Discussion Paper from 2013, the ABS identified the following codes with data gaps and quality issues and suggested a range of potential remedies to address these issues.

ANZSIC sectors with data gaps and quality issues identified by the ABS

Manufacturing

- 1320 Leather Tanning, Fur Dressing and Leather Product Manufacturing
- 2029 Other Ceramic Product Manufacturing
- 2599 Other Manufacturing n.e.c.

Support services

- 6639 Other Goods and Equipment Rental and Hiring n.e.c.
- 6962 Management Advice and Related Consulting Services
- 7211 Employment Placement and Recruitment Services
- 7212 Labour Supply Services
- 7299 Other Administrative Services n.e.c.
- 9499 Other Repair and Maintenance n.e.c.
- 9551 Business and Professional Association Services
- 9552 Labour Association Services
- 9559 Other Interest Group Services n.e.c.

Construction

- 3020 Non-Residential Building Construction
- 3109 Other Heavy and Civil Engineering Construction

Entertainment venues

- 4520 Pubs, Taverns and Bars
- 4530 Clubs (Hospitality)

Government administration

- 7510 Central Government Administration
- 7520 State Government Administration
- 7530 Local Government Administration

Arts Education

- 8101 Technical and Vocational Education and Training
- 8102 Higher Education

Further work was recommended on these data gaps in the Satellite Accounts feasibility study, but no action has been taken. This work should be revisited by SWG and the ABS (See Section 3.7).

The following further ANZSIC codes have been described variously as “partially in scope” or as “wholly in scope” in the Satellite Accounts. However, a number of economic studies have excluded these sectors questioning this scope description.

Manufacturing

- 1351 Clothing Manufacturing
- 1352 Footwear Manufacturing

Wholesaling and retailing

- 3712 Clothing and Footwear Wholesaling
- 3732 Jewellery and Watch Wholesaling
- 3735 Book and Magazine Wholesaling
- 3739 Other Goods Wholesaling nec
- 3800 Commission-Based Wholesaling
- 4242 Entertainment Media Retailing
- 4244 Newspaper and Book Retailing
- 4251 Clothing Retailing
- 4252 Footwear Retailing
- 4253 Watch and Jewellery Retailing
- 4259 Other Personal Accessory Retailing
- 4273 Antique and Used Goods Retailing
- 4279 Other Store-Based Retailing nec
- 4310 Non-Store Retailing
- 4320 Retail Commission-Based Buying and/or Selling
- 6632 Video and Other Electronic Media Rental and Hiring.

SWG and ABS should undertake further investigation of the scope and possible data gaps for these industry sectors.

3.6 Potential improvements to the ANZSIC-based definition of the cultural and creative industries

The following suggestions are made as potential areas of investigation to improve data reporting based on ANZSIC codes.

ANZSIC codes which cross domains

Several ANZSIC codes cover more than one industry domain.

To provide a more accurate definition for individual domains, the following codes should be apportioned across several domains.

ANZSIC code 9002: Creative Artists, Musicians, Writers and Performers

All of this code should be allocated across:

- Creative artists: literature and print media
- Creative artists: performing arts (other than music)
- Creative artists: broadcasting, electronic or digital media and film
- Creative artists: musicians
- Creative artists: visual arts and crafts.

ANZSIC code 6924: Other specialist design services

All of this code should be allocated across:

- Other specialised design services
- Fashion design (including jewellery and textile design).

ANZSIC code 4242: other entertainment media retailing

All of this code should be allocated across:

- Software: entertainment media (games) retailing
- Broadcasting: entertainment media (DVDs) retailing
- Music: entertainment media (cassettes, CDs) retailing
- ANZSIC codes partially in scope—cultural and creative components.

Codes indicated above by the ABS, in its Satellite Accounts Discussion Paper, to have data gaps include cultural and creative components. The Discussion Paper indicates methodologies to separate these components, with some reservations in relation to 4520 and 4530 (live music venues).

Using such methodologies, components of these ANZSIC codes could be allocated as follows to industry domains further improving the accuracy of employment and economic value measurement at the total industry level and at the industry domain level.

Domain: Support services—agents and employment services

Include parts of the following codes within this domain:

- 7211 Employment Placement and Recruitment Services: casting agencies, employment agencies
- 7212 Labour Supply Services: contract labour, labour hire services
- 9551 Business and Professional Association Services: professional associations
- 9552 Labour Association Services: unions
- 9559 Other Interest Group Services n.e.c.: peak bodies

Domain: Music and performing arts

Include parts of the following codes within this domain:

- 4520 Pubs, Taverns and Bars: music venues
- 4530 Clubs (Hospitality): music venues

Domain: Administration of culture / creative industries

Include parts of the following codes within this domain:

- 7510 Central Government Administration: Commonwealth arts department
- 7520 State Government Administration: State and Territory arts / cultural / creative industries departments
- 7530 Local Government Administration: Local Government arts / cultural divisions

Domain: Arts Education

Include parts of the following codes within this domain:

- 8101 Technical and Vocational Education and Training: music, visual arts, film, etc schools
- 8102 Higher Education: drama, music, visual arts, film, etc schools

Various domains: Retailing

Though not included in the Satellite Accounts Discussion Paper, parts of the following code should also be allocated across domains:

- 4279 Other Store-Based Retailing: Art galleries, craft retailing, photographic retailing

ANZSIC codes included by Nesta / CIIC but not in the Satellite Accounts

The following ANZSIC codes were assessed by Nesta / CIIC to have creative intensities greater than 30% and to include a significant number of creative jobs, but were excluded in the Satellite Accounts. These codes should be revisited in any review of future work to be done on the Satellite Accounts.

Domain: Performing arts (and possibly to be allocated across other domains)

- 9000 Creative and performing arts activities, nfd

Domain: Broadcasting, electronic or digital media and film

- 5400 Publishing (except internet & music publishing, nfd)
- 5410 Newspaper, periodical, book and directory publishing, nfd
- 5500 Motion picture and sound recording, nfd
- 5510 Motion picture and video activities, nfd
- 5600 Broadcasting (except internet), nfd
- 5620 Television broadcasting, nfd

Domain: Internet

- J000 Information Media and Telecommunications, nfd

ANZSIC Groups data gaps and remedies identified in the Satellite Accounts Discussion Paper

The table below has been copied from the ABS Discussion Paper: Cultural and Creative Activity Satellite Accounts (Section 5) of June 2013 as part of the feasibility study into the preparation of the Satellite Accounts.

This table identifies the key data gaps and quality issues in various ANZSIC groups and then suggests how these issues could be dealt with. In general, the solutions range from running a new survey,

modifying an existing survey (e.g. by boosting the size of its sample or changing what data is collected), or making greater use of unit record data that is available within current collections but which would require a significant amount of processing.

Revisiting this work should be the first priority for SWG and the ABS.

Key data gaps and quality issues in various ANZSIC groups

Data gap or quality issue	Potential remedies
1. Cultural and creative activity in the ANZSIC groups below cannot be identified directly from input-output tables.	
Group A	
1320 Leather Tanning, Fur Dressing and Leather Product Manufacturing	1.1. For Groups A-E, exclude the ANZSICs from the industry supply chains component of the satellite account. Some of the activity in these ANZSIC classes would then be automatically captured in the employment of people in cultural and creative occupations (component 2 of the satellite account). This option can be exercised for any ANZSIC individually.
2029 Other Ceramic Product Manufacturing	1.2. For Group A only, a list of Australian Business Numbers (ABN) is required for significant entities that belong to the ANZSIC classes and predominantly undertake the cultural and creative activities within them. This list could be compiled through desktop research and consultation with government or industry associations. Their share of total activity in the ANZSIC class would then be estimated using entity level data from existing ABS surveys or ATO business tax data.
2599 Other Manufacturing n.e.c.	
6639 Other Goods and Equipment Rental and Hiring n.e.c.	
6962 Management Advice and Related Consulting Services	
7211 Employment Placement and Recruitment Services	
7212 Labour Supply Services	
7299 Other Administrative Services n.e.c.	1.3. For Group B only, Building Approvals and Building Activity Survey records might be used to identify significant construction work on cultural facilities with some help from internet research. The value of work done on these significant jobs should be completely enumerated in the Building Activity Survey. The value of work done on significant jobs could be used to assign a share of total construction activity in input-output tables. Potentially the value of work done on less significant jobs could be separately modelled from Building Approvals.
9499 Other Repair and Maintenance n.e.c.	
9551 Business and Professional Association Services	
9552 Labour Association Services	
9559 Other Interest Group Services n.e.c.	
Group B	
3020 Non-Residential Building Construction	
3109 Other Heavy and Civil Engineering Construction	
Group C	
4520 Pubs, Taverns and Bars	1.4. For Group C only, an estimate of patron spending during live entertainment events could potentially be collected via a new survey. However, this would be particularly challenging to accurately measure since patrons will have difficulty recalling their expenditure ex-post, and venues will not necessarily be able to provide sales disaggregated this way. Several non-ABS studies have been undertaken on this topic ¹ and the resulting data was not of sufficient quality for a satellite account.
4530 Clubs (Hospitality)	
Group D	
7510 Central Government Administration	
7520 State Government Administration	
7530 Local Government Administration	

¹ For example, Ernst & Young (2011), *The Economic Contribution of the Venue-Based Live Music Industry in Australia*, report for the Australasian Performing Right Association, <<http://issuu.com/apraamcos/docs/livemusic?mode=window>>.

Data gap or quality issue	Potential remedies
<p>Group E</p> <p>8101 Technical and Vocational Education and Training</p> <p>8102 Higher Education</p>	<p>1.5. For Group D only, administration activity on cultural or creative policies and programs could be estimated by surveying specialist government units (e.g. offices for the arts). Employment or wages in these units would be divided by the ANZSIC class totals to derive a share that can be applied to the input-output table aggregates.</p> <p>1.6. For Group E only, the share of activity in education and training in cultural and creative fields could be estimated using student course data from the National Centre for Vocational Education Research and Department of Industry, Innovation, Science, Research and Tertiary Education.</p>
<p>2. Earnings of multiple jobholders, by occupation and industry, have not been collected since SEARS² 2007. Updated data would eventually be needed for the occupations component of the satellite accounts.</p>	<p>2.1. Multiple jobholders are identified in the Labour Force Survey each month. Their working hours and earnings in secondary jobs are likely to be collected each August starting in 2014, through the Characteristics of Employment supplementary survey. Questions would also need to be added to capture the industry and occupation of secondary jobs.</p> <p>2.2. Personal Income Tax (PIT) and Pay As You Go (PAYG) Withholding data from the ATO may be able to fill this need in the longer term, given taxpayers identify separate ABNs for each employer. PIT and PAYG data would need to be analysed in detail in order to determine their suitability for this purpose.</p>
<p>3. The GSS³ state and territory estimates of volunteer hours for 'arts/heritage' organisations have high relative standard errors (typically 25–50%).</p>	<p>3.1. Boost the GSS sample size. Only a small percentage of people reached by this survey are volunteers and therefore a substantial increase (e.g. 100%) in the GSS sample would be needed to make a noticeable improvement in the quality of volunteering data. This is likely to make it prohibitively expensive.</p>

² SEARS: Survey of Employment Arrangements, Retirement and Superannuation

³ GSS: General Social Survey

Data gap or quality issue	Potential remedies
<p>4. Detail on income, expenses, assets and liabilities are infrequently collected for many parts of the cultural and creative industry supply chains. When surveys are run, they often do not provide estimates for ANZSIC classes or as much detail as sought by stakeholders.</p>	<p>4.1. Boost the samples of EAS⁴ surveys on industries that include cultural and creative activities. This would enable income and expense estimates to be produced for selected groups of ANZSIC classes as well as at higher ANZSIC levels. These sample boosts would be quite expensive. The collection of assets and liabilities would require a further allocation of resources, as would the collection of a wider range of income and expense details than on the current standard EAS questionnaire.</p> <p>4.2. Business Income Tax (BIT) data from the ATO may be able to fill this need in the longer term. BIT data contains detail on the income and expenses of a business by type, as well as assets and liabilities. BIT data is not currently used for this purpose and would need to be analysed in detail in order to determine its suitability.</p>
<p>5. Published R&D expenditure does not provide estimates for many of the ANZSIC classes which comprise the cultural and creative industry supply chains.</p>	<p>5.1. Use R&D expenditure data to compile estimates for the aggregations of ANZSIC classes which make up the cultural and creative industry supply chains, both for Australia and a split by state and territory. A significant amount of compilation work would be required to produce and check the confidentiality of data tailored in this way.</p>

3.6.1 Recommendations—defining cultural / creative industries

The *ABS Discussion Paper: Cultural and Creative Activity Satellite Accounts* of June 2013 is a foundation document for the definition of the cultural and creative industries and for a range of economic studies in several jurisdictions in Australia.

The development of the first experimental Satellite Accounts was always viewed as a first step to advance the development of economic measures for the cultural and creative industries.

Jurisdictions have however selected sectors from the Satellite Accounts based for the most part—but not exclusively—on the scope and structure of their respective arts / cultural / creative industries Ministerial portfolio.

The adoption of the National Satellite Account definition as the core creative and cultural industry definition for all national and sub-national economic assessments will ensure consistent benchmarking across jurisdictions and enable comparative analysis against the national satellite accounts.

Variations to this definition due to differences in policy coverage at a jurisdictional level, can then be approached as a subset of this definition by removing (or adding) domains from the national definition as required.

⁴ EAS: Economic Activity Survey

The Nesta / CIIC report has identified additional ANZSIC codes as belonging to the creative industries, according to their creative intensity analysis, which were not considered in the Satellite Accounts Discussion Paper.

A number of ANZSIC codes were determined to be “partially in scope” in the Satellite Accounts. Further investigation of these codes could improve the coverage and accuracy of future studies and reports derived from the Satellite Accounts.

The Satellite Accounts Discussion Paper lists key data gaps and quality issues for selected groups of industry classes. The feasibility study also suggests methodologies and a priority list of further investigation to address these gaps and quality issues.

Recommendations

1. It is RECOMMENDED that SWG adopt the National Satellite Account definition as the core creative and cultural Industry definition for all national and sub-national economic assessments.
4. It is RECOMMENDED that in future work programs, SWG and the ABS further investigate:
 - data gaps and quality issues for a range of industry sectors, identified by the ABS in the 2013 Satellite Account Discussion Paper, detailing and pursuing potential remedies
 - ANZSIC codes determined to be “partially in scope” in the Satellite Accounts for future updates, and
 - refining the scope and definitions used in the Satellite Accounts for future updates including an examination of additional creative industry sectors identified in accordance with the creative intensity analysis.

4. Measuring the economic value of the cultural and creative industries

Economic value can be expressed in a variety of ways and can be consolidated from many components. These include direct and indirect value, with the further possibility of adding what are called wider economic benefits. Another concept used is Total Economic Value comprising use and non-use values. Other terms used are market and non-market value. All of these terms are described below.

These concepts are particularly relevant for cultural and creative industries. The “value” of a cultural good or service is invariably not fully captured in the dollar value—the direct economic value (often zero)—paid by the consumer.

4.1. Direct economic value

Output

Output refers to the goods and services produced by an industry or sector. It is the value of these goods and services, produced using a combination of labour, capital, and other goods and services including imports.

Value add

Value add is equivalent to output less goods and services sourced from other suppliers (including imports), and is the sector’s contribution to gross national or state product. By excluding goods and service inputs from other industries and imports, ‘value add’ avoids double counting as it does not include the value-added from other industries.

Value add terms include Gross Value Add (GVA), Industry Value Add (IVA) and contribution to Gross Domestic Product (GDP) or to Gross State Product (GSP). All of these describe the same value add term but at the economy-side, industry or jurisdiction level.

The Satellite Accounts, New South Wales and both Victorian reports mentioned above include estimates of Gross Value Add.

4.2. Indirect economic value

Flow-on / induced value

In addition to the direct economic contribution, the arts and culture sector also supports indirect (or flow-on) economic activity in specific sectors. For example, one important such link is through cultural tourism. Visitors attracted by arts and cultural events generate demand for goods and services from other industries such as transport and accommodation.

The BCG report on the Victorian Cultural / Creative Economy includes an estimate of the value of the cultural tourism industry.

Indirect economic linkages

Indirect linkages are the contributions to the broader economy through the inter-industry linkages outside the cultural / creative industry.

Computable General Equilibrium (CGE) economic modelling can be used to identify the linkages or flow-on impacts of the arts and culture sector throughout the economy.

Care needs to be taken in the choice of CGE modelling software if creative workers embedded outside the creative / cultural industries are included, in line with the ‘trident’ approach (see Section 3.2).

KPMG reports on arts and cultural industries prepared for Victoria, the ACT and New South Wales estimate the indirect economic value calculated using CGE modelling. For example for Victoria, in addition to the \$6.1 billion direct impact on the Victorian economy in 2010–11, the CGE model estimates a further \$5.3 billion flow-on economic benefit economy-wide.

Wider economic benefits

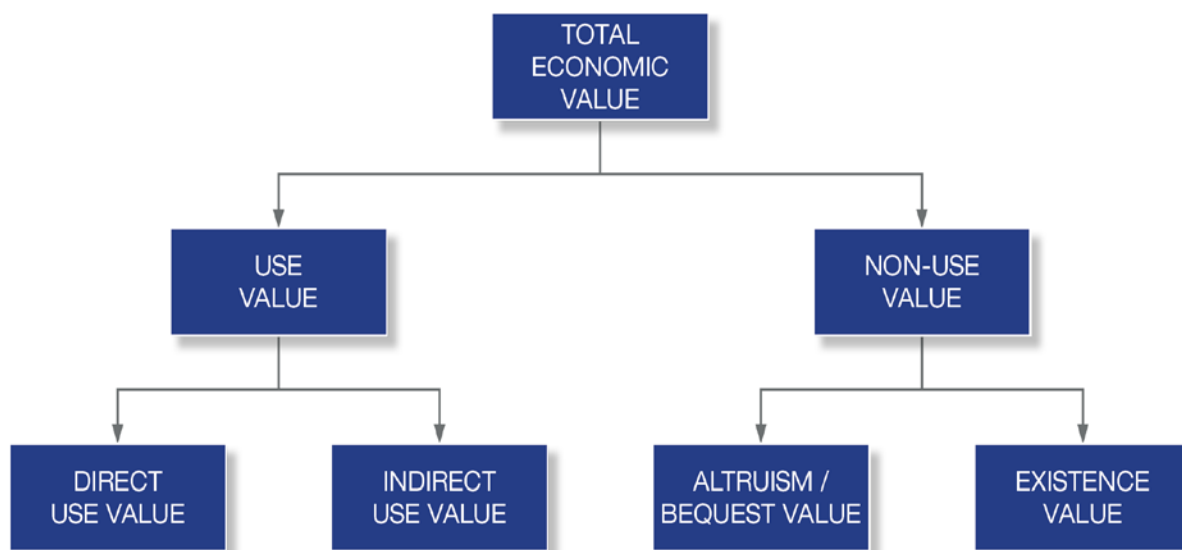
Further, it is recognised that this sector also contributes in other qualitative ways that are not captured in conventional economic statistics. For example, other benefits include contributing to a city’s liveability, helping to foster knowledge and skills transfers, contributing to education outcomes, destination branding and cultural diplomacy.

The examples of economic valuation studies quoted in other sections of this paper do not quantify or monetise these wider economic benefits.

4.3. Total economic value

There are further measures of value which are used by policy makers, in particular in a framework of maximising welfare or comparing alternative policy or budget initiatives.

Total Economic Value is the sum of all values governments seek to maximise. Total Economic Value includes use value and non-use value and comprises market value and non-market value.



A typical structure for Total Economic Value is presented below. As illustrated, non-market values can be both use and non-use values.



Use value

Direct use values come from actual use of a good or service (e.g. attending a cultural event).

Direct use values are more likely than other types of value to have a corresponding market activity which gives rise to a measure of value through a market price or return, eg, total income of a creative or cultural enterprise.

Direct use values can be categorised as either:

- **Consumptive**—there is active use of the non-market good or service by the valuer. An example of a consumptive direct use value is attendance at a performance.
- **Non-Consumptive**—the non-market good or service is not diminished or used up—there is vicarious [use by](#) the valuer. An example of a non-consumptive direct use value is watching a television programme about a cultural event—vicarious use of the event.

Indirect use values come from the use of a good or service but not through one's own engagement with it.

An example of indirect use value is the amenity from living near cultural facilities that you do not attend.

Indirect use values tend to be overlooked in a market setting but are sometimes reflected in market signals, such as property prices or the values of the final goods or services consumed, which may be influenced by the range of positive or negative impacts from others' direct use.

Non-use value

Total Economic Value goes beyond values from direct and indirect use of goods and services to 'non-use' values.

Non-use value is the value that people assign to goods and services even if they never have and never will use them. Non-use values have been categorised as:

- **option value**—the value placed on individual willingness to pay for maintaining an asset or resource even if there is little or no likelihood of the individual actually ever using it
- **bequest value**—values placed on individual willingness to pay for maintaining or preserving an asset or resource that has no use now, so that it is available for future generations
- **existence value**— reflecting the benefit people receive from knowing that say an environmental resource, such as Antarctica, exists, and
- **altruistic value**—the value placed on individual willingness to pay for maintaining an asset or resource that is not used by the individual, so that others may make use of it.

Altruism / bequest values arise from others' current or future use of a good or service.

Pure existence values arise from merely knowing that a valuable good or service exists.

A Deloitte study from 2013 estimated that the non-use value of the Sydney Opera House, derived from both its cultural heritage and identity as a national icon, to be 40-year present value of \$2.1 billion.

Creative Industries use and non-use values

Use value	Use value	Non-use value	Non-use value
Direct use value examples	Indirect use value examples	Bequest value examples	Existence value examples
Entertainment	Innovation	Heritage	Aesthetics
Recreation	Liveability	Transfer of	Identity
Education	Branding	knowledge/culture	Spirituality
Health & wellbeing	Social inclusion		Symbolism
	Institutional trust		Traditions

Market and non-market value

Market values for creative goods and services are reflected in the prices paid. For the industry, or an industry sector, the Output value (see Direct Economic Value above) would represent the total market value of that industry or sector.

Non-market values are values held by individuals or the community at large for goods and services that are not expressed in a market and hence do not have an accurate price from which to derive a value (i.e. the price differs strongly from the total value society is willing to pay for the good or service).

Public goods and externalities are the most common sources of non-market values. Public goods cannot be restricted or rationed so a price cannot be charged for their consumption and the market price does not take into account the full social benefits or costs of the good or service, known as externalities.

Total Economic Value provides a tool to consistently identify non-market values so they can be included in an economic assessment. Non-market values are primarily non-use values (bequest value and existence value), but may also include indirect use values (vicarious use of a good or service) and direct use values (actual use of a good or service).

Australian screen industry example—use and non-use value

Screen Australia released a report in November 2016 by Deloitte Access Economics which quantified the cultural value of the Australian screen industry in terms of use and non-use value.

Direct use value, measured by total economic contribution (value add) from Australian screen content (production, distribution and sales), footloose productions and digital games productions was estimated to be \$3 billion in 2014–15.

The report estimates a total audience value of \$17 billion in 2014–15 when direct use market and non-market values are included. Direct non-market value is attributed to the value of time spent watching Australian screen content, in particular where the content is free to watch.

Indirect use value for 2014–15 from additional tourism expenditure as a result of viewing Australian screen content was estimated to be \$725 million.

The Deloitte Access Economics report also estimated non-use cultural value of the Australian screen industry. The value of individuals personally having the option of viewing Australian content in the future—the option value—was estimated to be approximately \$511 million a year. Similarly, the value that individuals place on other people being able to watch Australian content in the future—the existence or altruism value—was estimated to be approximately \$415 million a year.

4.3. Other economic contribution measures

In addition to measures expressed as dollar values, there are other indicators of economic contribution which are regularly used.

Employment

The number of people employed by industry sector, or by jurisdiction, is readily available from ABS sources.

Based on Census figures, and regularly updated using Labour Force Surveys, employment figures from the ABS are a 'head count' of persons' primary jobs, regardless of hours worked. The ABS employment figures do not capture employment in jobs other than primary job.

Business counts

Another quantitative, non-financial measure is the number of business counts which can be reported by jurisdiction and by sector. This figure is readily available from the ABS. However, as outlined in Section 5, the location of a business, recorded by the ABS, may not correspond with the location of the business activity.

Business counts are most useful at showing trends over time for industry sub-sectors, indicating diversification or concentration, turbulence, and growth and decline of business activity, as well comparison of cultural / creative activity with rest of economy.

Other approaches

A range of alternative approaches to defining and quantifying the value of cultural and creative industries, which are considered to be beyond the scope of this report, is in [Appendix 5](#).

4.3. Recommendations—measuring value of cultural / creative industries

The measure of economic value consistently used in the satellite accounts as well as all the studies referred to in this report has been "value add". Value add excludes double counting, can be derived relatively easily from ABS data and aligns with Gross Domestic Product (GDP) and Gross State Product (GSP).

Value add is available by industry sector at the national level. There are models and methodologies that can estimate value- add at the state and territory jurisdiction level.

Another measure readily available from ABS sources by broad industry sector, and by jurisdiction, is number of persons employed.

Value add and employment meet the requirements of being robust, comparable and relevant and can be considered core measures for quantifying economic contribution in research reports on creative and cultural industries.

Other quantifiable measures of value, including indirect value and wider economic value, as well as use / non-use value and market / non-market values, require additional computer modelling and specialist surveys which may come at significant additional cost. These additional data sources may have inconsistent methodologies and survey instruments, and may require qualitative assessment, resulting in results which may not be directly comparable. However the results provide a 'more complete' picture of the value of the industry sectors, assets, programs and resources in the creative and cultural industries.

Other measures which are often used include volunteer contributions, value of heritage collections and non-quantifiable indicators such as brand value.

Value studies should include indirect and wider values, where possible and where resources allow, as supplementary to core value measures.

Recommendations

3. It is RECOMMENDED that jurisdictions use gross value add and number of persons employed as the minimum standard measure.
4. It is RECOMMENDED that for a more detailed jurisdictional picture, indirect and wider economic value be included where possible and resources permitting, noting that differing methodologies would likely mean that the results would not be readily comparable across jurisdictions.

5. Measuring economic value at the state and territory level

Cultural and creative industries are increasingly recognised by governments at all levels as an important industry sector and significant economic drivers. The need for robust and timely data at the state and territory, and indeed smaller geographic, level is becoming critical.

The Satellite Accounts have established a definitional framework for the creative/cultural industries, and baseline data on their contribution to the national economy. However, there is a serious lack of economic data at the state/territory level.

ABS Satellite Accounts

Commissioned by the Statistics Working Group, in 2014 the ABS investigated the feasibility of measuring the economic value of the cultural and creative industries at a state and territory level. This investigation explored business revenue and industry survey data and concluded the data was not yet able to support state splits of the national Satellite Accounts.

The major issue in being able to determine the economic impact at a state and territory level arises from the basis on which input/ output figures are produced in the national accounts. Sales or exports of goods and services are registered at the point of sale or export and not at the point of production. Many outputs accordingly cannot be clearly identified to their point of origin. A national television station is an example. The State or Territory location of the point of sale of the final product in many cases would not reflect the location of the production effort.

State data can be compiled for business counts and employment. However, as employee remuneration and business profits can vary considerably by State, these also do not enable the estimates of value added to split reliably.

A state and territory breakdown for components 3 & 4, (volunteering and non-market output of market producers in the cultural and/or creative industries), is not possible due to the absence of data other than at a national level. These figures represent a minor contribution to the overall estimate.

Bureau of Communications Research

The Arts Division of the Commonwealth Department of Communications and the Arts commissioned the Bureau of Communications Research (BCR), also a unit of the Department to review the 2008–09 Cultural and Creative activity satellite account work undertaken by the ABS and update using the latest available data in relation to:

- industry value add and contribution to gross domestic product (gdp)
- employment
- compensation of employees and profitability
- business counts
- value of volunteering and non-market output
- international comparisons.

BCR was requested to investigate the possibility of state and territory breakdowns from ABS data.

BCR confirmed that estimates are based on the input-output tables and product details published by the ABS, which are not available at a state/territory level.

Although business counts (including entries and exits) can be produced by the ABS at the state/territory level, a reliable methodology requires employment data at that level.

Employment figures in the 2008–09 satellite accounts were based on the most detailed occupational classifications from 2011 Census data being the most recent at that time. The ABS does not publish these data to a detailed level to allow replication. BCR's 2012–13 satellite accounts update employment figures are based on assumptions from the Labour Force Survey.

Volunteering cannot be broken down by state/territory because volunteering hours are published only on a national basis. Non-market output also could not be updated at the state/territory level due to tax data being not available recreate this by state/territory. However, both of these estimates have only a minor impact on the final result.

Other methodologies

Consultants reports

Consulting firms, such as KPMG and BCG, have calculated value add by state and territory from the National Satellite Accounts.

Calculations are generally based on employment numbers by industry sectors and value add per employee. In all of these cases, the methodology is appropriately annotated and qualified.

An example of the methodology used by BCG to determine the value of the cultural / creative economy in Victoria is [Appendix 6](#).

5.1 Recommendation—measuring value of cultural / creative industries by state and territory

The issue of breaking down the information available from the ABS at a national level has been, and continues to be, the subject of considerable effort.

The national accounts are the source of economic data for almost all research studies and reports on economic value and impact. The ability to present timely, regular, robust economic data at an individual state or territory level is clearly a priority for those jurisdictions.

In the ABS' 2013 discussion and information papers which preceded the publication of the Satellite Accounts it was proposed that development of state splits should be the next investment priority after the first national, experimental satellite accounts had been developed. The ABS anticipated, subject to resources and the quality of input data, the possible “development of the further information technology infrastructure required to compile the state and territory satellite account estimates efficiently in future periods.” (from Section 6 of ABS, Discussion Paper: Cultural and Creative Activity Satellite Accounts, June 2013)

Other detailed work on employment within the creative economy based on the 2016 Census is being undertaken by QUT as part of an ARC-funded project (see [Appendix 4](#)). This project involves several states and territories and may provide further detail, which is readily extendable to all jurisdictions, and progress a methodology for a split of national data.

Recommendation

It is RECOMMENDED that SWG continue to work with the ABS to explore a robust methodology to allocate national economic data relating to the cultural and creative industries across states and territories.

6. Appendices

Appendix 1: Cultural and creative industry inclusions and exclusions—recent economic studies

This table is presented by industry domains used in the Satellite Accounts. Within these industry domains are ANZSIC codes.

Industry domains used in the Satellite Accounts

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	NSW	Victoria—BCG	KPMG	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Cultural and creative	Cultural	Creative	Creative
Museums	Museum operation (8910)	✓	✓	✓	✓	✓		
Environmental heritage (zoos, botanical gardens)	Zoos, botanical gardens, nature reserves, conservation parks operation (8921, 8922)	✓				✓		✓
Libraries and archives	Libraries and archives (6010)	✓	✓	✓	✓	✓		
Literature and print media	Printing (1611)	✓			✓	✓		✓
Literature and print media	Printing support services (1612)		✓		✓		✓	✓
Literature and print media	Book and magazine wholesaling (3735)	✓				✓		
Literature and print media	Newspaper and book retailing (4244)	✓				✓		
Literature and print media	Publishing (except internet and music publishing) nfd (5400)						✓	✓
Literature and print media	Newspaper, periodical, book and directory publishing nfd (5410)						✓	✓
Literature and print media	Newspaper publishing (5411)	✓	✓	✓	✓	✓	✓	✓

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	NSW	Victoria—BCG	KPMG	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Cultural and creative	Cultural	Creative	Creative
Literature and print media	Magazine and other periodical publishing (5412)	✓	✓	✓	✓	✓	✓	✓
Literature and print media	Book publishing (5413)	✓	✓	✓	✓	✓	✓	✓
Literature and print media	Directory and mailing list publishing (5414)			✓	✓			
Literature and print media	Other publishing (not software, music and internet) (5419)		✓	✓	✓	✓		✓
Performing arts	Creative and performing arts activities, nfd (9000)						✓	✓
Performing arts	Performing arts operation (9001)	✓	✓	✓	✓	✓	✓	✓
Performing arts	Creative artists, musicians, writers and performers (9002)	✓	✓	✓	✓	✓	✓	✓
Performing arts	Performing arts venue operation (9003)	✓	✓	✓	✓	✓		✓
Architecture	Architectural services (6921)	✓	✓	✓	✓	✓	✓	✓
Advertising	Advertising services (6940)	✓	✓	✓	✓	✓	✓	✓
Design	Other specialised design services (6924)	✓	✓	✓	✓		✓	✓
Design	Computer system design and related services (7000)		✓	✓	✓		✓	✓
Broadcasting, electronic or digital media and film	Publishing (except internet & music publishing, nfd) (5400)						✓	✓

		Satellite accounts	Satellite accounts	NSW	Victoria— BCG	KPMG	Nesta / CIIC	Nesta / QUT
Industry domain	Sector (ANZSIC code)	Cultural	Creative	Creative	Cultural and creative	Cultural	Creative	Creative
Broadcasting, electronic or digital media and film	Newspaper, periodical, book and directory publishing, nfd (5410)						✓	✓
Broadcasting, electronic or digital media and film	Software publishing (5420)	✓	✓	✓	✓		✓	✓
Broadcasting, electronic or digital media and film	Motion picture and sound recording, nfd (5500)						✓	✓
Broadcasting, electronic or digital media and film	Motion picture and video activities, nfd (5510)						✓	✓
Broadcasting, electronic or digital media and film	Motion picture and video production (5511)	✓	✓	✓	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Motion picture and video distribution (5512)	✓	✓		✓	✓		
Broadcasting, electronic or digital media and film	Motion picture exhibition (5513)	✓	✓		✓	✓		
Broadcasting, electronic or digital media and film	Post production services and other motion picture and video activities (5514)	✓	✓	✓	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Broadcasting (except internet), nfd (5600)						✓	✓
Broadcasting, electronic or digital media and film	Radio broadcasting (5610)	✓	✓	✓	✓	✓	✓	✓

		Satellite accounts	Satellite accounts	NSW	Victoria— BCG	KPMG	Nesta / CIIC	Nesta / QUT
Industry domain	Sector (ANZSIC code)	Cultural	Creative	Creative	Cultural and creative	Cultural	Creative	Creative
Broadcasting, electronic or digital media and film	Television broadcasting, nfd (5620)						✓	✓
Broadcasting, electronic or digital media and film	Free-to-air television broadcasting (5621)	✓	✓	✓	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Cable and other subscription broadcasting (5622)	✓	✓	✓	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Internet publishing and broadcasting (5700)	✓	✓	✓	✓	✓	✓	✓
Broadcasting, electronic or digital media and film	Internet service providers, web search portals, and data processing services (5900)							✓
Broadcasting, electronic or digital media and film	Internet service providers and web search portals (5910)			✓				
Broadcasting, electronic or digital media and film	Data processing and web hosting services (5921)			✓				
Broadcasting, electronic or digital media and film	Video and other electronic media rental and hiring (6632)	✓			✓			
Broadcasting, electronic or digital media and film	Information media and telecommunication s, nfd (J000)							✓
Music composition and publishing	Sound recording and music publishing (5520)							✓

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	NSW	Victoria—BCG	KPMG	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Cultural and creative	Cultural	Creative	Creative
Music composition and publishin	Music publishing (5521)	✓	✓	✓	✓			
Music composition and publishin	Music and other sound recording activities (5522)	✓	✓	✓	✓	✓		✓
Visual arts and crafts	Jewellery and silverware manufacturing (2591)	✓	✓	✓	✓	✓	✓	✓
Visual arts and crafts	Jewellery and watch wholesaling (3732)	✓	✓					
Visual arts and crafts	Watch and jewellery retailing (4253)	✓	✓			✓		
Visual arts and crafts	Professional photographic services (6991)	✓	✓	✓	✓	✓	✓	✓
Fashion	Clothing manufacture (1351)		✓	✓	✓	✓		
Fashion	Footwear manufacture (1352)		✓		✓	✓		
Fashion	Clothing and footwear wholesaling (3712)		✓					
Fashion	Clothing and footwear retailing (4251, 4252)		✓			✓		
Other culture goods manufacturing and sales	Entertainment media retailing (4242)	✓				✓		

Industry domain	Sector (ANZSIC code)	Satellite accounts	Satellite accounts	NSW	Victoria—BCG	KPMG	Nesta / CIIC	Nesta / QUT
		Cultural	Creative	Creative	Cultural and creative	Cultural	Creative	Creative
Supporting activities—arts education	Arts education (8212)	✓			✓	✓		
Supporting activities—arts education	Arts and recreation services, nfd (R000)							✓
Other (across all domains):								
Volunteer services	n.a.	✓	✓				n.a.	n.a.
Non-market output	n.a.	✓	✓				n.a.	n.a.

Source: Creative Victoria (Department of Economic Development, Jobs, Transport and Resources), Victoria's Creative and Cultural Economy: Fact Pack, Boston Consulting Group, April 2015.

Appendix 2: Nesta / CIIC ANZSIC codes creative intensity analysis

Creative intensity analysis of ANZSIC codes

ANZSIC code	ANZSIC class	Creative intensity 2011
1612	Printing Support Services	32%
1891	Photographic Chemical Product Manufacturing	67%
2591	Jewellery and Silverware Manufacturing	53%
5400	Publishing (except Internet and Music Publishing), nfd	50%
5410	Newspaper, Periodical, Book and Directory Publishing, nfd	53%
5411	Newspaper Publishing)	42%
5412	Magazine and Other Periodical Publishing	50%
5413	Book Publishing	33%
5419	Other Publishing (except Software, Music and Internet)	25%
5420	Software Publishing	41%
5500	Motion Picture and Sound Recording Activities, nfd	37%
5510	Motion Picture and Video Activities, nfd	43%
5511	Motion Picture and Video Production	60%
5514	Post-production Services and Other Motion Picture and Video Activities	59%
5521	Music Publishing	20%
5522	Music and Other Sound Recording Activities	19%
5600	Broadcasting (except internet), nfd	31%
5610	Radio Broadcasting	55%
5620	Television Broadcasting, nfd	43%
5621	Free-to-Air Television Broadcasting	54%
5622	Cable and Other Subscription Broadcasting	28%
5700	Internet Publishing and Broadcasting	46%
5900	Internet Service Providers, Web Search Portals and Data Processing Services, nfd	39%
6921	Architectural Services	73%
6924	Other Specialised Design Services	75%
6940	Advertising Services	49%
6991	Professional Photographic Services	79%
7000	Computer System Design and Related Services	33%
9000	Creative and Performing Arts Activities, nfd	43%
9001	Performing Arts Operation	55%
9002	Creative Artists, Musicians, Writers and Performers	77%
J000	Information Media and Telecommunications, nfd	39%

Source: Creative Industries Innovation Centre, Valuing Australia's Creative Industries, SGS, December 2013.

Appendix 3: Nesta / QUT ANZSIC codes creative intensity analysis

Creative intensity analysis of ANZSIC codes

ANZSIC code	ANZSIC class	Creative intensity 2011
J000	Information Media and Telecommunications, nfd	36%
1612	Printing Support Services	32%
5600	Broadcasting (except Internet)	27%
R000	Arts and Recreation Services, nfd	24%
6991	Professional Photographic Services	78%
9002	Creative Artists, Musicians, Writers and Performers	76%
5511	Motion Picture and Video Production	64%
6924	Other Specialised Design Services	61%
5514	Post-production Services and Other Motion Picture and Video Activities	57%
9001	Performing Arts Operation	57%
5621	Free-to-Air Television Broadcasting	55%
6921	Architectural Services	54%
5610	Radio Broadcasting	52%
2591	Jewellery and Silverware Manufacturing	51%
5620	Television Broadcasting	49%
5510	Motion Picture and Video Activities	47%
5410	Newspaper, Periodical, Book and Directory Publishing	47%
5400	Publishing (except Internet and Music Publishing)	46%
5412	Magazine and Other Periodical Publishing	45%
9000	Creative and Performing Arts Activities	45%
6940	Advertising Services	42%
5411	Newspaper Publishing	39%
5700	Internet Publishing and Broadcasting	38%
6010	Libraries and Archives	34%
5900	Internet Service Providers, Web Search Portals and Data Processing Services	31%
5420	Software Publishing	31%
5500	Motion Picture and Sound Recording Activities	30%
5413	Book Publishing	30%
5419	Other Publishing (except Software, Music and Internet)	27%
8910	Museum Operation	27%
5622	Cable and Other Subscription Broadcasting	25%

ANZSIC code	ANZSIC class	Creative intensity 2011
7000	Computer System Design and Related Services	24%
5520	Sound Recording and Music Publishing	22%
9003	Performing Arts Venue Operation	21%
5522	Music and Other Sound Recording Activities	16%
5921	Data Processing and Web Hosting Services	16%
2029	Other Ceramic Product Manufacturing	13%
5521	Music Publishing	12%
5910	Internet Service Providers and Web Search Portals	10%
5920	Data Processing, Web Hosting and Electronic Information Storage Services	0%

Source: Queensland University of Technology, Australian Creative Employment in 2011—applying the NESTA Dynamic Mapping definition methodology to Australian Classifications, Peter L. Higgs and Sasha Lennon.

Appendix 4: Cultural and creative industry ANZSIC classes

Cultural and creative industry ANZSIC classes

Code	ANZSIC class name	Segment	Domain	Comments from ABS Satellite Accounts Feasibility Study
1320	Leather Tanning, Fur Dressing and Leather Product Manufacturing	Both	Visual arts and crafts	Partially in-scope. Associated with crafts.
1351	Clothing Manufacturing	Creative	Fashion	Wholly in-scope.
1352	Footwear Manufacturing	Creative	Fashion	Wholly in-scope.
1611	Printing	Cultural	Literature and print media	Partially in-scope. Photocopying is out-of-scope.
1612	Printing Support Services	Creative	Literature and print media	Wholly in-scope.
1620	Reproduction of Recorded Media	Cultural	Other culture goods manufacturing and sales	Wholly in-scope.
2029	Other Ceramic Product Manufacturing	Both	Visual arts and crafts	Partially in-scope. Associated with crafts.
2591	Jewellery and Silverware Manufacturing	Creative	Visual arts and crafts	Partially in-scope. Coin minting is out-of-scope.
2599	Other Manufacturing nec	Cultural	Other culture goods manufacturing and sales	Partially in-scope. Included for musical instrument manufacturing.
3020	Non-Residential Building Construction	Cultural	Supporting activities	Partially in-scope. Included for construction of cultural facilities.
3109	Other Heavy and Civil Engineering Construction	Cultural	Supporting activities	Partially in-scope. Included for construction of cultural facilities.
3712	Clothing and Footwear Wholesaling	Creative	Fashion	Wholly in-scope.
3732	Jewellery and Watch Wholesaling	Both	Visual arts and crafts	Partially in-scope. Watch and clock wholesaling are out-of-scope.
3735	Book and Magazine Wholesaling	Cultural	Literature and print media	Wholly in-scope.
3739	Other Goods Wholesaling nec	Cultural	Other culture goods manufacturing and sales	Partially in-scope. Included for musical instrument and recorded media wholesaling.
3800	Commission-Based Wholesaling	Cultural	Other culture goods manufacturing and sales	Partially in-scope. Included for its role in reselling cultural and creative goods.
4242	Entertainment Media Retailing	Cultural	Other culture goods manufacturing and sales	Wholly in-scope.

Code	ANZSIC class name	Segment	Domain	Comments from ABS Satellite Accounts Feasibility Study
4244	Newspaper and Book Retailing	Cultural	Literature and print media	Wholly in-scope.
4251	Clothing Retailing	Creative	Fashion	Wholly in-scope.
4252	Footwear Retailing	Creative	Fashion	Wholly in-scope.
4253	Watch and Jewellery Retailing	Creative	Visual arts and crafts	Partially in-scope. Watch retailing is out-of-scope.
4259	Other Personal Accessory Retailing	Creative	Fashion	Partially in-scope. Briefcase and luggage retailing are out-of-scope.
4273	Antique and Used Goods Retailing	Cultural	Other culture goods manufacturing and sales	Partially in-scope. Coin and stamp dealing are out-of-scope.
4279	Other Store-Based Retailing nec	Cultural	Other culture goods manufacturing and sales	Partially in-scope. Included for retail art gallery operation and musical instrument retailing.
4310	Non-Store Retailing	Cultural	Other culture goods manufacturing and sales	Partially in-scope. Included for direct selling of books.
4320	Retail Commission-Based Buying and/or Selling	Cultural	Other culture goods manufacturing and sales	Partially in-scope. Included for selling and buying of books.
4520	Pubs, Taverns and Bars	Both	Performing arts	Partially in-scope. Included for the activity generated at venues during live entertainment performances.
4530	Clubs (Hospitality)	Both	Performing arts	Partially in-scope. Included for the activity generated at venues during live entertainment performances.
5411	Newspaper Publishing	Both	Literature and print media	Wholly in-scope.
5412	Magazine and Other Periodical Publishing	Both	Literature and print media	Partially in-scope. Racing forms publishing is out-of-scope.
5413	Book Publishing	Both	Literature and print media	Wholly in-scope.
5414	Directory and Mailing List Publishing	Creative	Literature and print media	Not included in Satellite Accounts
5419	Other Publishing (except Software, Music and Internet)	Creative	Literature and print media	Partially in-scope. Calendar and diary publishing is out-of-scope.
5420	Software Publishing	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.
5511	Motion Picture and Video Production	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.

Code	ANZSIC class name	Segment	Domain	Comments from ABS Satellite Accounts Feasibility Study
5512	Motion Picture and Video Distribution	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.
5513	Motion Picture Exhibition	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.
5514	Post-production Services and Other Motion Picture and Video Activities	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.
5521	Music Publishing	Both	Music composition and publishing	Wholly in-scope.
5522	Music and Other Sound Recording Activities	Both	Music composition and publishing	Wholly in-scope.
5610	Radio Broadcasting	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.
5621	Free-to-Air Television Broadcasting	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.
5622	Cable and Other Subscription Broadcasting	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.
5700	Internet Publishing and Broadcasting	Both	Broadcasting, electronic or digital media, and film	Wholly in-scope.
5910	Internet Service Providers and Web Search Portals	Creative	Broadcasting, electronic or digital media, and film	Not included in Satellite Accounts
5921	Data Processing and Web Hosting Services	Creative	Broadcasting, electronic or digital media, and film	Not included in Satellite Accounts
6010	Libraries and Archives	Both	Libraries and archives	Wholly in-scope.
6632	Video and Other Electronic Media Rental and Hiring	Cultural	Broadcasting, electronic or digital media, and film	Wholly in-scope.
6639	Other Goods and Equipment Rental and Hiring nec	Both	Other culture goods manufacturing and sales	Partially in-scope. Included for art work, video recorder and sound equipment rental.
6921	Architectural Services	Both	Design	Wholly in-scope.
6924	Other Specialised Design Services	Both	Design	Wholly in-scope.
6940	Advertising Services	Both	Design	Wholly in-scope.
6962	Management Advice and Related Consulting Services	Cultural	Supporting activities	Partially in-scope. Included for artist / entertainer management services.
6991	Professional Photographic Services	Both	Visual arts and crafts	Wholly in-scope.
7000	Computer System Design and Related Services	Creative	Design	Wholly in-scope.

Code	ANZSIC class name	Segment	Domain	Comments from ABS Satellite Accounts Feasibility Study
7211	Employment Placement and Recruitment Services	Cultural	Supporting activities	Partially in-scope. Included for casting agency operation.
7212	Labour Supply Services	Cultural	Supporting activities	Partially in-scope.
7299	Other Administrative Services nec	Cultural	Supporting activities	Partially in-scope. Included for cultural event management, arts promotion and theatre and concert booking services.
7510	Central Government Administration	Cultural	Supporting activities	Partially in-scope.
7520	State Government Administration	Cultural	Supporting activities	Partially in-scope.
7530	Local Government Administration	Cultural	Supporting activities	Partially in-scope.
8101	Technical and Vocational Education and Training	Cultural	Supporting activities	Partially in-scope.
8102	Higher Education	Cultural	Supporting activities	Partially in-scope.
8212	Arts Education	Cultural	Supporting activities	Wholly in-scope.
8910	Museum Operation	Both	Museums	Wholly in-scope.
8921	Zoological and Botanical Gardens Operation	Cultural	Environmental heritage	Wholly in-scope.
8922	Nature Reserves and Conservation Parks Operation	Cultural	Environmental heritage	Wholly in-scope.
9001	Performing Arts Operation	Both	Performing arts	Wholly in-scope.
9002	Creative Artists, Musicians, Writers and Performers	Both	Performing arts	Wholly in-scope.
9003	Performing Arts Venue Operation	Both	Performing arts	Wholly in-scope.
9499	Other Repair and Maintenance nec	Cultural	Supporting activities	Partially in-scope. Included for jewellery and musical instrument repair.
9551	Business and Professional Association Services	Cultural	Supporting activities	Partially in-scope.
9552	Labour Association Services	Cultural	Supporting activities	Partially in-scope.
9559	Other Interest Group Services nec	Cultural	Supporting activities	Partially in-scope.

Source: Australian Bureau of Statistics, Discussion Paper: Cultural and Creative Activity Satellite Accounts, Australia (ABS 5271.0.55.001), June 2013.

Appendix 5: Alternative cultural and creative industry approaches

Copyright Industries

The Australian Copyright Council has adopted a methodology from the World Intellectual Property Organization and has identified four classes of copyright industries:

- **Core**—industries that exist only because of copyright and are primarily involved in the creation, manufacture, production, broadcast and distribution of copyrighted works.
Examples of activities: press and literature, music, motion picture and video, software and databases.
- **Partial**—a portion of the industries' activities are related to copyright through manufacture, performance, exhibition, broadcast, communication or distribution and sales.
Examples of activities: manufacture and sales of media equipment, computers and equipment, musical instruments, photocopiers.
- **Interdependent**—involved in the manufacture, performance, broadcast and communication in order to support and facilitate the creation of copyrighted works and other protected subject matter.
Examples of activities: crafts, furniture, architecture, interior design, museums.
- **Non-dedicated support**—duties are included in this group where part of the activities are related to broadcast, communication, distribution and sales in protected subject matter and they are not included in the core copyright industries.
Examples of activity: general wholesale and retailing, telephony and internet.

A generic set of indicators, including 'value add', trade and employment are generated for each of these classes. Total value for the copyright industries is determined from a weighted sum of these classes.

Annual estimates are obtained using weighted changes from a base year for sectors within these classes.

The Council endorses this methodology and states that it facilitates consistent analysis of the economic contribution of the copyright industries over time and across countries.

Using this methodology, the Copyright Council of Australia has estimated the value add of the copyright industries to the Australian economy to be \$111.4 billion in 2014.

Cultural Development Network

(Extract from CDN website)

Cultural Development Network (CDN) works mainly with Local Government to ensure that cultural development planning can take an evidence-based, outcome-focussed approach and demonstrate the contribution of cultural engagement.

Historically, arts and cultural organizations have counted only outputs (number of arts products created, event participants or tickets sold) as metrics of success. They do not measure outcomes—what difference the work ultimately makes—to those who receive it.

When outcomes have been considered, they have often been categorised as either intrinsic or instrumental, where intrinsic is seen to be directly related to the cultural experience itself, and instrumental occurs outside, or in addition to, the cultural experience. Evaluation processes have often focussed on social and economic outcomes, those seen as instrumental, partly because outcome measures are better established in those domains, and also because economic outcomes are often prioritised.

CDN has developed a set of Measurable Cultural Outcomes over five domains (cultural, social, civic, economic and environmental), of public policy and activity.

All activity can be considered as initiating in one of those domains, and all outcomes can also be categorised within them. Cultural activities obviously have cultural outcomes, but may also contribute to economic and social outcomes.

CDN's proposed measures of the contribution of cultural outcomes in the economic domain:

Employment-enhancing skill development facilitated

Development of skills or knowledge that enhance the capacity of an individual to obtain employment in the future. This could include specific artistic skills, such as a new art form or repertoire, but also more generalised skills such as creative thinking, capacity for collaboration, persistence

Individual economic benefit

Financial benefits to individuals directly through the arts initiative including wages, contract income, product sales, royalties, commission fees

Direct employment provided

Jobs directly generated as a result of the initiative: for artists, and others including tech staff, front of house staff, directors, teachers, mentors

Indirect employment stimulated

Jobs indirectly generated as a result of the initiative such as staff in restaurants, hotels.

Visitor direct expenditure generated

Amount of money spent directly as a result of the arts initiative including entry fees, ticket sales, product sales.

Visitor indirect expenditure generated

Amount of money spent indirectly as a result of the arts initiatives in accommodation and food businesses

Local business patronised

Local businesses that experience a change in patronage as a result of the initiative not necessarily measured in expenditure at the time

IBISWorld

IBISWorld is an industry forecasting and advisory corporation, based on unique and comprehensive databases.

IBISWorld Industry Reports are used by finance professionals, management consultants, business brokers, entrepreneurs and policy-makers. The Reports are used for understanding market size, competitors, drafting business plans, benchmarking, forecasting, business valuations, litigation support and due diligence.

Information provided in a typical industry segment report includes:

- industry performance
- products and markets
- competitive landscape
- a list of major organisations
- operating conditions
- key statistics.

Industry sectors used by IBISWorld are based on the ABS ANZSIC codes.

Queensland University of Technology

As part of a research project supported by the ARC and a number of jurisdiction partners, QUT is preparing analyses of employment in creative industries from Census data up to and including the 2016 Census.

The research will provide the current levels of employment, mean incomes with the creative economy, creative industries and creative occupations—broken down into the categories of creative services and cultural production and the segments and subsectors within them. In addition, the research will provide:

- dynamics of growth and decline of cultural and creative activity based on comparative analysis of Census 2011, 2006, and—through cross walk to the previous classification schemes—with 2001 and 1996 data, and
- national employment level analysis, and analysis by state and territory as well as selected regions and major cities.

UNESCO Framework for Cultural Statistics Handbook

A useful reference is one of the publications in this UNESCO Handbook series, *Measuring the economic contribution of cultural industries: A review and assessment of current methodological approaches*.

This publication is a comprehensive examination of approaches, methodologies and practices used internationally. It indicates that issues of industry sector definitions and allocations to sub-national jurisdictions are common to many countries.

The report provides an analysis of the advantages and disadvantages of the use of the Satellite Accounts approach and other methodologies.

Appendix 6: Calculation of value of cultural / creative economy for a state / territory

An example of the methodology used by BCG to determine the value of the cultural / creative economy in Victoria.

Appendix 4: Detailed methodology

Outline of approach used to model economic dimensions of C/C economy

Model	Creative and Cultural Industries	Embedded jobs
Jobs	Use Census data (2011; update in 2016) to determine proportion of 4-digit ANZSIC codes in the 3-digit summarising codes Use current 3-digit ANZSIC code labour force statistics, and proportions from 2011, to estimate the current employment for creative industries	Using proportion of embedded jobs in ABS 1-digit ANZSIC codes in Australia 2009 as defined by Satellite accounts (Creative and Cultural industries) Multiply by current number of jobs in ANZSIC 1-digit codes
GVA	Using 3-digit ANZSIC codes for jobs, determine proportion of jobs within 2-digit summarising codes Use 2-digit ANZSIC code GVA / person employed in Victoria to determine the GVA generated by Creative industries employees	Apply average 1-digit ANZSIC code GVA / person employed in each year to total employees in industry calculated for that year
Exports	<p>Merchandise: Sum merchandise exports for ANZSIC 4-digit codes (provided by DFAT)</p> <p>Services: Sum services exports in Victoria for those selected as "creative" by BCG</p> <p>Tourism:</p> <ul style="list-style-type: none"> Derive international and domestic tourist growth projections from KPMG <i>Economic Impact of the Victorian Arts and Cultural Sector</i> (2013) report, which uses unpublished Tourism Research Australia data Derive average spend per domestic and international tourist projections from Tourism Research Australia International Visitor Survey 2014 Multiply number of tourists by spend per tourist to calculate total contribution 	

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Appendix 4: Detailed methodology (cont'd)

Worked example – Creative Industries jobs and GVA

ANZSIC code 6921: Architectural services

Model	Explanation of method	Outcome
Jobs – only 3-digit ANZSIC codes available	Determine number of jobs in 2011 Census Calculate these jobs as % of 3-digit ANZSIC code Multiply this ratio by present day number of workers in 3-digit ANZSIC code	In 2011, Architectural services hired 10,236 in Victoria This represents 25% of Victorian workers in the Architectural, Engineering and Technical services industry (ANZSIC code 692) (vs. 21% NSW and 15% nationally) Therefore, in Victoria in 2013, this represents approximately 15,800 workers (25% of 64,000) Outcome: ~15,800 workers
GVA – only 2-digit ANZSIC codes available	Determine average GVA for 2-digit ANZSIC codes Determine per-worker GVA for 2-digit ANZSIC codes Multiply number of workers in sub-sector by \$ per worker to calculate total GVA	In 2013, average GVA for ANZSIC code 69 (Professional, scientific and Technical services excluding computer design and services) was \$19.8b Per worker, this is \$99.2k Therefore, in Victoria in 2013, it is estimated that 15,800 workers in architectural services would generate a total of \$1.57b in GVA Outcome: ~\$1.6b GVA

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Source: Creative Victoria (Department of Economic Development, Jobs, Transport and Resources), Victoria's Creative and Cultural Economy: Fact Pack, Boston Consulting Group, April 2015.

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The Statistics Working Group manages a national program of cultural data collection, research and analysis on behalf of the Meeting of Cultural Ministers.

The Statistics Working Group aims to improve policy and decision—making in cultural industries and government by enhancing the quality, range and availability of relevant cultural statistics.

Visit www.arts.gov.au/mcm/cultural-data-online for more information about the Meeting of Cultural Ministers Statistics Working Group.