Creative Industries Economic Estimates

(Experimental Statistics)

Full Statistical Release

9 December 2010

Our aim is to improve the quality of life for all through cultural and sporting activities, support the pursuit of excellence, and champion the tourism, creative and leisure industries.

Experimental Statistics

As this is our first attempt to measure the Creative Industries using new Standard Industrial Classifications (SIC), this series of economic estimates are classed as experimental statistics. The statistics are therefore still in the development phase, and should be treated with caution. The methods and classifications used will be developed following further consultation with users. If you would like to contribute to this, please either use the feedback form on the release webpage, or contact us at CIEEBulletin@culture.gsi.gov.uk.

Please note

These estimates are a snapshot of the Creative Industries using the most recent data available, and should not be compared with previous estimates due to the change of Standard Industrial Classification (SIC) codes used. Please see the technical note for full details of this change. The new SIC codes used to produce these estimates represent a first attempt at doing so, and are likely to be updated at a later date.

Contents

Headline Findings

1. <u>Contribution to the economy – Gross Value Added (Table 1)</u>

- The Creative Industries, excluding Crafts, accounted for 5.6% of Gross Value Added (GVA) in 2008.

- Software & Electronic Publishing accounts for the most GVA out of all the Creative Industries (2.5% in 2008).

2. <u>Employment (Table 2)</u>

- In the summer quarter of 2010 (July – September), creative employment totalled just under 2.3 million jobs. This consisted of just under 1.3 million jobs in the Creative Industries and just under 1 million further creative jobs in businesses outside these industries.

- The Software & Electronic Publishing sector had the highest number of employees out of all the Creative Industries, with over 600,000. The Music and Visual & Performing Arts sector had the highest numbers of self-employed people, with over 200,000.

3. <u>Numbers of businesses (Table 3)</u>

- In 2010, there were an estimated 182,100 enterprises in the Creative Industries on the Inter-Departmental Business Register (IDBR), meaning they make up 8.7% of all enterprises. The true number of enterprises in the Creative Industries is likely to be even higher, as certain sectors such as Crafts contain predominantly small businesses.

- Nearly two-thirds of the businesses in the Creative Industries are contained within two sectors; Software and Electronic Publishing (81,700 companies) and Music and the Visual & Performing Arts (30,800 companies).

4. <u>Exports</u>

   Exports of services from the Creative Industries totalled £17.3 billion in 2008, equating to 4.1% of all goods and services exported. Estimates of exports from the Creative Industries have not been fully updated in this statistical release, as they are still based on the old SIC 2003 codes. Full estimates will only be produced once the new SIC 2007 codes have been applied to exports data produced by the Office for National Statistics (ONS).

<u>Please note</u>
Changes in the SIC codes used for the "Software and Electronic Publishing" category of this release appear to be responsible for the GVA figure being lower than in 2007. The SIC 2007 codes have improved our ability to measure this category considerably, as we can now better exclude businesses whose main activity is not creative. If these businesses were included (SIC 62.09), we estimate that GVA for 2008 would actually be higher (just below 7%) than it was in 2007. If such businesses were removed from the previous estimates, we estimate that the GVA would have been approximately 5.2% in 2007. Please refer to the technical note for more details on this.

Table 1: Gross Value Added (GVA) of the Creative Industries, UK
2008 Data

Sector	GVA at basic prices (£million)	Proportion of total UK GVA (%)
1. Advertising	7,800	0.7%
2. Architecture	3,600	0.3%
3. Art & Antiques	300	0.03%
5. Design	1,600	0.2%
6. Designer Fashion	100	0.01%
7. Film, Video & Photography	2,700	0.3%
9 & 10. Music & Visual and Performing Arts	3,200	0.3%
11. Publishing	10,100	1.0%
8 & 12. Software & Electronic Publishing	26,400	2.5%
8 & 12. Digital & Entertainment Media	200	0.02%
13. TV & Radio	3,200	0.3%
Total GVA for Creative Industries	**59,100**	**5.6%**
Total GVA for all Industries	**1,053,900[2]**	

Source: Annual Business Survey (ABS), Office for National Statistics

Notes
1. The data available did not allow us to measure GVA for the Crafts Industry
2. This figure is taken from the National Accounts Blue Book, and adjusted for the fact that the ABS does not have complete coverage of the economy. For further details please see the technical note.

Table 2: Creative Employment, Great Britain
2010 Data (July - September)

Sector	Employees in Creative Industries	Self-employed in Creative Industries	Employees doing creative jobs in other industries	Self-employed people doing creative jobs in other industries	Total Employment
1. Advertising	89,100	25,400	163,800	21,000	299,200
2. Architecture	63,300	35,300	26,300	3,500	128,400
3. Art & Antiques	6,600	3,200			9,800
4. Crafts			66,300	45,100	111,400
5. Design	35,000	56,600	113,500	20,400	225,400
6. Designer Fashion	2,500	3,700	3,200	400	9,700
7. Film, Video & Photography	26,000	13,300	10,700	10,500	60,500
9 & 10. Music & Visual and Performing Arts	67,200	136,300	33,300	69,000	305,800
11. Publishing	151,100	20,500	55,700	9,300	236,600
8 & 12. Software & Electronic Publishing	347,000	81,000	290,600	34,500	753,000
8 & 12. Digital & Entertainment Media	5,600	700			6,200
13. TV & Radio	77,300	37,300	10,500	7,200	132,300
Total	**870,600**	**413,200**	**774,000**	**220,700**	**2,278,500**

Source: Labour Force Survey (LFS), Office for National Statistics

Employment within Creative Industries	**1,283,800**
Employment in businesses outside Creative Industries	**994,700**
Total Creative Employment	**2,278,500**
All Employment[1]	**29,189,000**
Total creative employment as a proportion of all employment (%)	**7.8%**

Notes
1. Taken from Labour Market Statistics Bulletin, November 2010.
2. The coverage of this data is broader than that of the other bulletin tables, since it is possible to count not only jobs in the Creative Industries, but also creative occupations in businesses which are classed as being outside these industries, e.g. graphic designers working in a manufacturing firm.
3. The data available did not allow us to measure employment for certain categories. These have been left blank in the table above.

Table 3: Number of business in the Creative Industries, UK
2010 Data

Sector	Number of enterprises	As a proportion of Creative Industry Enterprises (%)	As a proportion of all enterprises (%)
1. Advertising	14,800	8.1%	0.7%
2. Architecture	11,500	6.3%	0.5%
3. Art & Antiques	2,700	1.5%	0.1%
5. Design	14,200	7.8%	0.7%
6. Designer Fashion	900	0.5%	0.04%
7. Film, Video & Photography	9,900	5.4%	0.5%
9 & 10. Music & Visual and Performing Arts	30,800	16.9%	1.5%
11. Publishing	7,700	4.2%	0.4%
8 &12. Software & Electronic Publishing	81,700	44.9%	3.9%
8 & 12. Digital & Entertainment Media	200	0.1%	0.01%
13. TV & Radio	7,700	4.2%	0.4%
Total	182,100	100.0%	8.7%
All enterprises	2,100,400		

Source: Inter-Departmental Business Register (IDBR), Office for National Statistics

Notes
1. The data available did not allow us to measure the number of enterprises in the Crafts Industry.

Defining and measuring the Creative Industries

What are the Creative Industries?
The Creative Industries are defined in the [2001 Creative Industries Mapping Document](#) as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of economic property". They include:

1. Advertising
2. Architecture
3. Art and antiques
4. Crafts
5. Design
6. Designer fashion
7. Film and video
8. Interactive leisure software
9. Music
10. The performing arts
11. Publishing
12. Software and computer services
13. Television and radio

What do we measure for these industries?
We use this mapping document definition to estimate annually the contribution that these industries make to the economy. These estimates consist of four areas:

1. Gross Value Added (GVA) - see next page for explanation
2. Employment
3. Numbers of businesses
4. Exports

We measure these things both for the creative industries as a whole, and for each of the individual industries listed above.

Why measure the Creative Industries?
The series began as a result of development work on official data sources following a commitment in the 2001 Creative Industries Mapping Document to consider how to provide more timely and consistent data on the activity of the Creative Industries. The figures we produce are a vital source of information for many people who develop policy for, champion or work within the Creative Industries. They are one of the only data sources available in this area. We work closely with several Creative Industries organisations to produce them. These include:

- NESTA
- Skillset
- E-skills
- Creative and Cultural Skills (CCS)

How do we measure the Creative Industries?
We measure the Creative Industries by using Standard Industrial Classification (SIC) codes. These codes are explained in more detail on page 9. We pick out the codes that best match our definition of the Creative Industries (from the mapping document mentioned above), and use the data from these codes to produce our estimates. The full list of codes we have used for this release can be found in Annex A.

What is Gross Value Added (GVA)?

Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy. Broadly, this is measured by the income generated by the business, industry or sector less their intermediate consumption of goods and services used up in order to produce their output.

GVA is therefore the standard measure used in official statistics to measure the contribution of industries to the economy, and enables comparison across sectors/industries. It is calculated as follows:

GVA + taxes on products – subsidies on products = Gross Domestic Product

So GDP and GVA are closely linked, but by accounting for taxes and subsidies, GVA gives us a better measure of the contribution of Creative Industries to the economy.

You can find out more about GVA on the ONS website - GVA.

Standard Industrial and Occupational Classifications (SIC and SOC)

What are Standard Industrial Classifications?

The UK Standard Industrial Classification of Economic Activities (SIC) classifies businesses by the type of activity they engage in. It provides a framework for collecting and presenting data on businesses. What is more, it is comparable with the Eurostat system (NACE) at the 4 digit level, meaning that business data is consistent across much of Europe. Different countries can be compared using this system.

The system works by classifying businesses in a hierarchical manner, starting at a very basic (1 digit) level, then classifying them in more and more detail down to the lowest (5 digit) level possible. However, even at this level of detail it is not practical to have a code for every single individual industry (some codes are simply too small), and so some industries may be put together with others to make up a category.

Update of SIC Codes (see Annex B for details)

In January 2008 the Standard Industrial Classification (SIC) codes were updated from SIC 2003 to SIC 2007. Some old codes were removed from the list as they were no longer relevant, new ones were added as new industries emerge, and others were moved around, split up, or aggregated with others. More information on the updating of the SIC codes can be found here:
http://www.statistics.gov.uk/methods_quality/sic/downloads/SIC2007explanatorynotes.pdf

In the last year the updated SIC 2007 codes have been applied to several datasets produced by the Office for National Statistics (ONS). These include three of the main datasets used in our estimates:

- Annual Business Survey (ABS)
- Inter-Departmental Business Register (IDBR)
- Labour Force Survey (LFS)

However, the new SIC 2007 codes have not yet been applied to the International Trade in Services (ITIS) publication. This still uses the SIC 2003 codes, and is scheduled to be updated in March 2011. Given that this is the main data source for the estimates of exports that we produce, we have decided not to publish detailed exports estimates in this release. This is because they would not be consistent with our data on GVA, number of business and employment within the Creative Industries, which all use data sources updated to SIC 2007 codes. We have therefore only produced headline findings for exports. For more detailed findings we refer you to the exports estimates produced in February 2010.

The updating of SIC codes has had a significant impact on this statistical release. Some new categories have allowed us to report on sectors (e.g. Design) that we have never previously been able to. There is now also more detailed data available on areas such as computer software: where previously many different activities were found together under one code, these have now been split up so that they each have their own individual code.

It therefore follows that in this release we have been able to be more precise with the definitions we use to measure the Creative Industries than previously, and

differences between the 2008 and 2007 data may reflect this. Nevertheless, it should still be remembered that the figures we produce are <u>estimates only</u>, and that the data sources (and thus SIC codes) we use do not perfectly match our definition of the Creative Industries. For every update of the SIC codes, the accuracy of our estimates should improve, but there will always be a degree of estimation involved.

What Are Standard Occupational Classifications (SOC)?

The Standard Occupational Classification (SOC) is a means of classifying the occupation of a person according to the type of work they do. Like the SIC, it provides a framework within which data can be collected for major surveys such as the Labour Force Survey. The Standard Occupational Classification was last updated in 2000, and is due to be updated again at the start of 2011.

Much like the SIC, the SOC system works by classifying someone's occupation firstly at a very basic (1 digit) level, and then classifying them in more and more detail down to the lowest (4 digit) level possible.

Interpretation of the figures

<u>All readers should be aware that</u>:

1. <u>All figures are estimates</u> since the Standard Industrial Classification (SIC) and Standard Occupational Classification (SOC) codes in the data sources used do not always perfectly map to the sectors we are interested in within the Creative Industries. Our attempt to map the data to these sectors is shown in Annex A.

2. The updating of SIC codes and the different methodology used in this release means that these estimates <u>should not</u> be compared to the 2007 estimates produced in February 2010. This release purely represents a snapshot of the Creative Industries using the most recent data available.

3. There is considerable overlap between the digital industries and the creative industries. Therefore any estimates that attempt to measure the digital industries should not be compared to or aggregated with estimates of the creative industries. Along similar lines, if we included other digital industries in our estimates (e.g. Telecommunications), this would increase the figures significantly. Work to improve estimates of digital industries and their alignment with the Creative Industries is ongoing.

4. As far as possible National Statistics (NS) sources are used as the basis for the estimates to ensure consistency and hence comparability between sectors. Where NS data are not available, other research has been used which may not have been subjected to the same quality checks. It therefore follows that these estimates, and some of the overall totals which may include these estimates, may not be as reliable as National Statistics.

5. With the exception of the number of businesses counts, sources are sample surveys. These data are thus subject to sampling errors, in particular when sample sizes are small for the detailed classifications.

6. Due to the structure of the SIC codes used in data sources, it is necessary to combine 'Music' with 'Performing Arts' to produce these estimates.

7. Due to demand for a separate "Computer Games" category, we have divided up the "Software, Computer Games and Electronic Publishing" category used previously into two smaller categories. Of these, "Digital and Entertainment Media" now fairly closely resembles the Computer Games sector, although a proportion of it is other digital media. It is not possible to separate this category out further at present.

8. All tables are for the UK, with the exception of Table 3 (employment) which relates to Great Britain*.

* Great Britain = England, Wales and Scotland
United Kingdom = England, Wales, Scotland and Northern Ireland

Future work

Creating a Back Time Series
This release is a snapshot of the Creative Industries using the most up to date data available. No attempt has yet been made to make this data comparable with previous releases. Whilst the new SIC 07 codes have allowed us to improve the way we measure the Creative Industries, they also provide us with a significant challenge to produce estimates that are still comparable with previous years.

Whilst the Office for National Statistics (ONS) have provided guidance on how best to map the old SIC 2003 codes to the new SIC 2007 codes, they have not yet done any backdating for any of their data sources that now use the new SIC 2007 codes. In 2011 we will work with the ONS to investigate the possibility of establishing a consistent back time series, so that these estimates are more comparable with previous ones. This will be a complex task, and may not be possible for all sectors. We will keep users on our mailing list informed of progress in this area. If you wish to join this mailing list, please e-mail us at CIEEBulletin@culture.gsi.gov.uk.

Improving the SIC Codes Used to Measure the Creative Industries
The updating of the SIC codes has provided a good opportunity for us to review the framework we use to measure the Creative Industries. Following extensive user consultation, we have already improved this framework in this release (see Annex B). However, there is still more work needed to fully develop it. This work will be ongoing through 2011, and we will be working closely with the ONS to use detailed breakdowns of their data sources to help us come up with the most accurate framework possible. Further consultation with users will also be important in this process.

Producing Estimates for Exports Based on the SIC 2007 Codes
In March 2011, the International Trade in Services (ITIS) publication produced by the ONS will be updated using the new SIC 2007 codes. This will mean that we can revise the way in which we measure exports from the Creative Industries, which we have been unable to do in this release.

Applying Updated SOC Codes to our Estimates
In January 2011, the Standard Occupational Classification (SOC) codes will be updated by the ONS, for the first time since 2000. This gives us a chance to revise the way we measure creative employment. The employment figures in our next release are therefore planned to reflect the new 2010 SOC codes as well as the 2007 SIC codes.

Regional Estimates of the Creative Industries
We recognise that demand exists amongst many of our users for regional estimates. In 2011 we will be working with the ONS to investigate the possibility of producing these to meet this demand.

Applying Proportions to the Data

There are many cases in these estimates where the detailed 5 digit data we wanted could not be obtained. In such cases, we have looked at ways of using other, related data sources to apply proportions to 4 digit data, or asked the Office for National Statistics (ONS) to do this for us. The main reasons for applying proportions were as follows:

1. **5 digit data was unavailable for employment and number of businesses**

   This was by far the most common reason for applying proportions to data. Detailed 5 digit data was available from the Annual Business Survey (ABS), but not from the Inter-Departmental Business Register (IDBR) or Labour Force Survey (LFS). Therefore whilst we had detailed 5 digit data on GVA for the Creative Industries, 4 digit data was the best breakdown we had when measuring the number of enterprises and employees.

   The ABS covers the number of enterprises and total employment (as well as GVA) for each 5 digit SIC code. We were therefore able to use this data to calculate proportions for the breakdown of each 4 digit SIC code in the ABS. We then applied these proportions to the 4 digit IDBR and LFS data, giving us estimated 5 digit data on employment and the number of businesses. The exact proportions applied can be found in Annex A, table A2.

   It is important, however, to note that because of the time lag involved with the ABS data, this means that we are applying proportions from 2008 ABS data to 2010 IDBR and LFS data. It therefore follows that these proportions may not be entirely accurate, and may have changed since 2008. The data therefore needs to be treated with some caution.

   We will continue to work with ONS to better identify ways to access 5 digit IDBR and LFS data, so that we will be able to use this directly rather than having to apply proportions as we have done here.

2. **A further breakdown of a 4 digit code was not available**

   There were two cases where we needed to take proportions for this reason:

   a) Code 74.10 – Specialised Design Activities
   The inclusion of this new category in the 2007 SIC codes allowed us to define "Design" and "Designer fashion" more accurately than previously. However, this code was not available at any greater level of detail than the 4 digit level. We therefore asked the Office for National Statistics (ONS) to do a small piece of modelling work to look at how this category might be broken down further. This involved looking at all the businesses in this category that employed more than 20 people, and calculating how the GVA, employment and number of enterprises was divided between different types of business.

   This allowed us to separate out fashion and architectural design from other design activities. However, it must be noted that this work is modelling only, and therefore can only provide us with a very rough estimate of the breakdown of this category. Any data below 4 digit level for this category must be treated with caution.

We are hopeful that future changes in SIC codes will lead to category 74.10 being broken down further into 5 digit components.

b) Code 59.12 -   Motion picture, video and television programme post-production activities
The lack of 5 digit data for this category meant that we were faced with a problem of how to divide the data in this category between "TV & Radio" and "Video, Film & Photography". It was decided that applying the proportions from a closely related category (59.11 – Motion picture, video & TV programme production activities) would be the most accurate way to do so. However, this clearly has some risks given that the breakdowns in the two categories could in reality be different. The data therefore needs to be treated with some caution.

We are hopeful that future revisions of the SIC codes will break down 59.12 into 5 digit components, in the same way that similar categories 59.11 and 59.13 have been. Until then, we will look at the raw data in preparation for the next release, to find out whether the breakdown of this category is actually similar to 59.11.

3. Disclosure issues meant that we did not have access to 5 digit data

These issues meant that we were unable to obtain a 5 digit level breakdown for category 78.10 – "Activities of employment placement agencies" in time for this release. This was because splitting this 4 digit code down into its 5 digit components could potentially allow us to identify individual businesses within the data.

The ONS therefore kindly agreed to provide us with approximate proportions detailing how this category was divided between its 5 digit components in terms of GVA, number of enterprises and employment. These proportions were then applied to the 4 digit data to allow us to make our estimates. The nature of applying proportions means that the resulting data must be treated with some caution.

For the next release, we intend to apply for special access to the 5 digit breakdown for category 78.10, so that proportions will not be needed.

4. Standard Occupational Classification (SOC) codes did not go into the level of detail needed

When we were calculating creative employment outside of creative businesses (using SOC codes), there were two cases where it was necessary to apply proportions to the data from the Labour Force Survey. These were for different reasons:

1. The SOC code spanned two different creative industry sectors
Code 3422 (Product, clothing and related designers) contains employment in both design and designer fashion. Therefore in order to split up data from this code, proportions were taken from the modelling work done by ONS to split up employment in SIC category 74.10 ("Specialised Design Activities" - see

above). These modelled proportions were calculated using employment data from the 2008 ABS. Therefore <u>we advise caution</u> when using this data, as it uses proportions calculated using 2008 ABS SIC data and applies them to 2010 LFS SOC data.

2. <u>Only part of the SOC code was relevant to the creative industries</u>
   In the case of code 9121 (Labourers in Building and Woodworking Trades), only a small part of this code actually involves creative employment. Therefore proportions were provided by the ONS to reflect the proportion of people in this category that were doing creative jobs. These were then applied to the data for this code.

Annex A – Mapping the Creative Industries to Official Classifications

Table A1 – Mapping of the Creative Industries to the 2007 Standard Industrial Classification (SIC) for Annual Business Survey (ABS) data

Mapping Document Chapter	Sector	Standard Industrial Classification (SIC)		Proportion of code taken for GVA (*)
		Code	**Description**	
1	Advertising	73.11	Advertising agencies	
		73.12	Media Representation	
2	Architecture	71.11	Architectural activities	
		74.10	Specialised design activities	✓ (4.5%)
3	Art & Antiques	47.78/1	Retail sale in commercial art galleries	
		47.79/1	Retail sale of antiques including antique books, in stores	
4	Crafts	Majority of businesses too small to be picked up in business surveys		
5	Design	74.10	Specialised design activities	✓ (89.6%)
6	Designer Fashion	10 Codes	Clothing Manufacture (†)	✓ (0.5%)
		74.10	Specialised design activities	✓ (5.8%)
7	Video, Film & Photography	18.20/2	Reproduction of video recording	✓ (25%)
		74.20	Photographic activities	✓ (25%)
		59.11/1 & 59.11/2	Motion picture and video production activities	
		59.12	Motion picture, video & TV post-production activities	✓ (18.4%)
		59.13/1 & 59.13/2	Motion picture and video distribution activities	
		59.14	Motion picture projection activities	
9 & 10	Music and the Visual & Performing Arts	59.20	Sound recording and music publishing activities	
		18.20/1	Reproduction of sound recording	✓ (25%)
		90.01	Performing arts	
		90.02	Support activities to performing arts	
		90.03	Artistic creation	
		90.04	Operation of arts facilities	
		78.10/1	Motion picture, television and other theatrical casting	✓ (0.07%)

Table A1 (continued) – Mapping of the Creative Industries to the 2007 Standard Industrial Classification (SIC) for Annual Business Survey (ABS) data

Mapping Document Chapter	Sector	Standard Industrial Classification (SIC)		Proportion of code taken (*)
		SIC	**Description**	
11	Publishing	58.11	Book publishing	
		58.13	Publishing of newspapers	
		58.14	Publishing of journals and periodicals	
		58.19	Other publishing activities	✓ (50%)
		63.91	News agency activities	
8 & 12	Software & Electronic Publishing	18.20/3	Reproduction of computer media	✓ (25%)
		62.01/2	Business and domestic software development	
		62.02	Computer consultancy activities	
		58.29	Other software publishing	
8 & 12	Digital & Entertainment Media	58.21	Publishing of computer games	
		62.01/1	Ready-made interactive leisure and entertainment software development	
13	Radio & TV	60.10	Radio broadcasting	
		60.20	Television programming and broadcasting activities	
		59.11/3	TV programme production activities	
		59.12	Motion picture, video & TV post-production activities	✓ (81.6%)
		59.13/3	TV programme distribution activities	

*   As some SICs contain activity deemed to be outside of the Creative Industries, only a proportion of the total activity within these codes is included in the estimates (see Annex C).

†   10 Clothing Manufacturing codes used for Designer Fashion:
      14.11, 14.12, 14.13, 14.14, 14.19, 14.20, 14.31, 14.39, 15.12, 15.20

Table A2 – Mapping of the Creative Industries to the 2007 Standard Industrial Classification (SIC) for Inter-Departmental Business Register (IDBR) and Labour Force Survey (LFS) data

Mapping Document Chapter	Sector	Standard Industrial Classification (SIC)		Proportion of code taken for IDBR (*)	Proportion of code taken for LFS (*)
		Code	Description		
1	Advertising	73.11	Advertising agencies		
		73.12	Media Representation		
2	Architecture	71.11	Architectural activities		
		74.10	Specialised design activities	✓ (4.5%)	✓ (4.5%)
3	Art & Antiques	47.78	Other retail sale of new goods in specialised stores	✓ (4.7%)	✓ (3.8%)
		47.79	Retail sale of antiques including antique books, in stores	✓ (39.6%)	✓ (21.1%)
4	Crafts	Majority of businesses too small to be picked up in business surveys			
5	Design	74.10	Specialised design activities	✓ (89.7%)	✓ (89.7%)
6	Designer Fashion	10 Codes	Clothing Manufacture (†)	✓ (0.5%)	✓ (0.5%)
		74.10	Specialised design activities	✓ (5.8%)	✓ (5.8%)
7	Video, Film & Photography	18.20	Reproduction of recorded media	✓ (4.3%)	✓ (10%)
		74.20	Photographic activities	✓ (25%)	✓ (25%)
		59.11	Motion picture and video production activities	✓ (53.5%)	✓ (9.6%)
		59.12	Motion picture, video & TV post-production activities	✓ (53.5%)	✓ (9.6%)
		59.13	Motion picture and video distribution activities	✓ (96%)	✓ (90%)
		59.14	Motion picture projection activities		

Table A2 (continued) – Mapping of the Creative Industries to the 2007 Standard Industrial Classification (SIC) for Inter-departmental Business Register (IDBR) and Labour Force Survey (LFS) data

Mapping Document Chapter	Sector	Standard Industrial Classification (SIC)		Proportion of code taken for IDBR (*)	Proportion of code taken for LFS (*)
		SIC	Description		
9 & 10	Music and the Visual & Performing Arts	59.20	Sound recording and music publishing activities		
		18.20	Reproduction of recorded media	✓ (18.3%)	✓ (10%)
		90.01	Performing arts		
		90.02	Support activities to performing arts		
		90.03	Artistic creation		
		90.04	Operation of arts facilities		
		78.10	Activities of employment placement agencies	✓ (1%)	✓ (0.5%)
11	Publishing	58.11	Book publishing		
		58.13	Publishing of newspapers		
		58.14	Publishing of journals and periodicals		
		58.19	Other publishing activities	✓ (50%)	✓ (50%)
		63.91	News agency activities		
8 & 12	Software & Electronic Publishing	18.20	Reproduction of recorded media	✓ (2.3%)	✓ (5%)
		62.01	Computer programming activities	✓ (99.2%)	✓ (98.2%)
		62.02	Computer consultancy activities		
		58.29	Other software publishing		
8 & 12	Digital & Entertainment Media	58.21	Publishing of computer games		
		62.01	Computer programming activities	✓ (0.8%)	✓ (1.8%)

Table A2 (continued) – Mapping of the Creative Industries to the 2007 Standard Industrial Classification (SIC) for Inter-departmental Business Register (IDBR) and Labour Force Survey (LFS) data

Mapping Document Chapter	Sector	Standard Industrial Classification (SIC)		Proportion of code taken for IDBR (*)	Proportion of code taken for LFS (*)
		SIC	Description		
13	Radio & TV	60.10	Radio broadcasting		
		60.20	Television programming and broadcasting activities		
		59.11/3	TV programme production activities	✓ (46.5%)	✓ (90.4%)
		59.12	Motion picture, video & TV post-production activities	✓ (46.5%)	✓ (90.4%)
		59.13/3	TV programme distribution activities	✓ (4%)	✓ (10%)

*   As some SICs contain activity deemed to be outside of the Creative Industries, only a proportion of the total activity within these codes is included in the estimates (see Annex B for the methodology used to derive these proportions).

†   10 Clothing Manufacturing codes used for Designer Fashion:
       14.11, 14.12, 14.13, 14.14, 14.19, 14.20, 14.31, 14.39, 15.12, 15.20

Table A3 – Mapping of the Creative Industries to the 2000 Standard Occupational Classifications (SOC), *to estimate number of creative jobs outside of businesses in the Creative Industries*

Mapping Document Chapter	Sector	Standard Occupational Classification (SOC)		Proportion of code taken (Δ)
		SOC	**Description**	
1	Advertising	1134	Advertising and Public Relations managers	
		3433	Public Relations officers	
		3543	Marketing associate professionals	
2	Architecture	2431	Architects	
		2432	Town Planners	
		3121	Architectural technologists and Town Planning technicians	
3	Art & Antiques	No codes match this sector		
4	Crafts	5491	Glass and Ceramics makers, decorators and finishers	
		5492	Furniture makers, other craft woodworkers	
		5493	Pattern makers (moulds)	
		5494	Musical Instrument makers and tuners	
		5495	Goldsmiths, Silversmiths, Precious Stone workers	
		5496	Floral arrangers, Florists	
		5499	Hand Craft occupations not elsewhere classified	
		8112	Glass and Ceramics process operatives	
		9121	Labourers in Building and Woodworking Trades (Δ)	✓ (5%)
5	Design	2126	Design and Development engineers	
		3411	Artists	
		3421	Graphic Designers	
		3422	Product, Clothing and related designers	✓ (93.9%)
6	Designer Fashion	3422	Product, Clothing and related designers	✓ (6.1%)
		5411	Weavers and Knitters	
7	Video, Film & Photography	3434	Photographers and Audio-Visual equipment operators	
9 & 10	Music and the Visual & Performing Arts	3412	Authors, Writers	
		3413	Actors, Entertainers	
		3414	Dancers and Choreographers	
		3415	Musicians	

Table A3 (continued) - Mapping of the Creative Industries to the 2000 Standard Occupational Classifications (SOC), *to estimate number of creative jobs outside of businesses in the Creative Industries*

Mapping Document Chapter	Sector	Standard Occupational Classification (SOC)		Proportion of code taken
		SOC	Description	
		3416	Arts officers, producers and directors	
11	Publishing	3431	Journalists, Newspaper and Periodical editors	
		5421	Originators, Compositors and Print preparers	
		5422	Printers	
		5423	Bookbinders and Print finishers	
		5424	Screen printers	
8 & 12	Software & Electronic Publishing	1136	Information and Communication Technology managers	
		2131	IT Strategy and Planning professionals	
8 & 12	Digital & Entertainment Media	No codes match this sector		
13	Radio & TV	3432	Broadcasting associate professionals	
		5244	TV, Video and Audio engineers	

Δ   As some SOCs contain employment activity deemed to be outside of the Creative Industries, only a proportion of the total activity within these codes is included in the estimates (see Annex C).

Annex B – Mapping the SIC 2003 Codes to SIC 2007

This provides an industry by industry guide to how the codes we use have changed with the introduction of SIC 2007. A full guide to how the SIC 2003 codes have been mapped to the SIC 2007 codes can be found in the "SIC 2003 - SIC 2007 correlation" documents here: http://www.statistics.gov.uk/statbase/product.asp?vlnk=14012. This shows proportions for how the data from the SIC 2003 codes is now split up between the SIC 2007 codes.

A quick reminder:

ABS – Annual Business Survey
IDBR – Inter-Departmental Business Register
LFS – Labour Force Survey

All proportions relate to data on GVA (taken from the ABS). For SIC 2007 codes, in some cases different proportions were taken for LFS and IDBR data. These can all be found in annex A.

1. Advertising

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
74.40	Advertising	100%	73.11	Advertising agencies	100%
			73.12	Media representation	100%

The SIC 2003 code has now been broken down into two separate codes in SIC 2007, giving a greater level of detail than previously.

2. Architecture

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
74.20	Architecture and engineering activities and related technical consultancy	25%	71.11	Architectural activities	100%
			74.10	Specialised design activities	4.5%

The SIC 2003 code required us to take a proportion of a code which covered several other areas as well as architecture. In SIC 2007, architectural activities have their own code. A piece of modelling work by the ONS has allowed us to include a proportion of "Specialised Design Activities", as a small proportion of this covers architectural design.

3. Art & Antiques

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
52.48	Other retail sale in specialised stores	5%	47.78/1	Retail sale in commercial art galleries	100%
52.50	Retail sale of second-hand goods in stores	5%	47.79/1	Retail sale of antiques including antique books, in stores	100%

Using SIC 2003 codes, we were only able to take a proportion of the 4 digit codes for this category, based on proportions provided for us by the ONS. This year, in the case of data on GVA, we were able to use 5 digit data from the ABS, making our estimate more precise.

However, we did not have 5 digit data available for businesses and employment. For these, we used 5 digit data from the ABS on employment and number of enterprises, and applied proportions that were calculated based on this split to the 4 digit LFS and IDBR data. The proportions used can be found in annex A.

4. Crafts

As was the case with the SIC 2003 codes, there are still no identifiable code(s) to measure the crafts sector. Furthermore, the majority of businesses in this sector are too small to be picked up in business surveys such as the ABS and IDBR.

5. Design

SIC 2003	SIC 2007		Proportion Taken
No codes available that matched this sector	74.10	Specialised design activities	89.6%

The addition of the new category in SIC 2007 allows us to measure the design industry for the first time. A piece of modelling work by the ONS allowed us to split up this category, such that architectural and fashion design could be taken out and put in their relevant area, leaving all other design activities in this section. Slightly different proportions were taken for GVA, employment and number of businesses based on this modelling work. These can be found in annex A.

6. Designer Fashion

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
9 Codes	Clothing Manufacture	0.5%	10 Codes	Clothing Manufacture	0.5%
74.87	Other business activities not elsewhere classified	2.5%	74.10	Specialised design activities	5.8%

As in SIC 2003, small proportions of several clothing manufacturing codes have been taken. These codes have been reviewed, with the 9 that were used previously kept in, and one extra code (15.12 – Manufacture of luggage, handbags and the like, saddlery and harness) also included, due to its mention in a 2010 report by Oxford Economics for the British Fashion Council, which looked at the value of the UK Fashion Industry[1].

In addition to this, the modelling work done by the ONS on the "Specialised Design" category (74.10) allows us to calculate what proportion of this represents fashion design. Using this represents a vast improvement on having to take a proportion of a much more general category (74.87) as in 2003.

7. Video, Film & Photography

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
22.32	Reproduction of video recording	25%	18.20/2	Reproduction of video recording	25%
74.81	Photographic activities	25%	74.20	Photographic activities	25%
92.11	Motion picture and video production		59.11/1 & 59.11/2	Motion picture and video production activities	
92.12	Motion picture and video distribution		59.12	Motion picture, video & TV post-production activities	18.4%
92.13	Motion picture projection		59.13/1 & 59.13/2	Motion picture and video distribution activities	
			59.14	Motion picture projection activities	

Our measurement of this sector improved thanks to the addition of a new code on post-production activities in SIC 2007. The codes were also changed, such that TV production and distribution were now grouped with motion picture and video production and distribution in 59.11 and 59.13. Previously TV production and distribution were placed in "Radio and TV activities".

---

[1] See sources and references (Annex D)

Whilst this change did not pose a problem for our data on GVA, as we had 5 digit ABS data and thus could split out TV from motion picture and video, it did pose a problem for our data on employment and number of businesses, which we only had to the 4 digit level. We resolved this by taking proportions from 5 digit ABS data on employment and number of businesses, and applying these to the 4 digit data we had from the IDBR and LFS.

Along similar lines, "Reproduction of video recording" was a 4 digit code in SIC 2003, but became a 5 digit code in SIC 2007. This was not a problem where 5 digit data was available (i.e. for GVA), but where only 4 digit data was available for employment and number of businesses, we had to apply proportions to this 4 digit data using 5 digit ABS data on employment and businesses.

Unfortunately category 59.12 (Post-production activities) was not split up into 5 digit data in the same way that 59.11 and 59.13 were. This meant that that we were faced with a problem of how to divide the data in this category between "TV & Radio" and "Video, Film & Photography". We decided to calculate proportions based on the 5 digit breakdown of a closely related category (59.11 – Motion picture, video & TV programme production activities), and then apply these to 59.12.

9 & 10. Music & the Visual & Performing Arts

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
22.14	Publishing of sound recordings		59.20	Sound recording and music publishing activities	
22.31	Reproduction of sound recording	25%	18.20/1	Reproduction of sound recording	25%
92.31	Artistic and literary creation and interpretation		90.01	Performing arts	
92.32	Operation of arts facilities		90.02	Support activities to performing arts	
92.34	Other entertainment activities not elsewhere classified	50%	90.03	Artistic creation	
			90.04	Operation of arts facilities	
92.72	Other recreational activities not elsewhere classified	25%	78.10/1	Motion picture, television and other theatrical casting	0.07%

The codes on arts activities have improved, with 4 codes now specifically referring to these, compared to 2 previously. This means we now no longer need to take proportions of a more general code (92.34) as we did for SIC 2003.

As was the case for reproduction of video recording, reproduction of sound recording is now a 5 digit code in SIC 2007, whereas it was a 4 digit code in SIC 2003. This was not a problem where 5 digit data was available (i.e. for GVA), but where only 4 digit data was

available for employment and number of businesses, we had to apply proportions to this 4 digit data using 5 digit ABS data on employment and businesses.

There was an issue with disclosure for code 78.10 in SIC 2007, such that ONS were unable to supply us with the 5 digit data because it contained figures small enough for individual businesses to potentially be identified. Therefore they provided us with approximate proportions for how 78.10 was split up between 78.10/1 and 78.10/9. We then applied these proportions to 4 digit data on GVA, employment and number of businesses.

The proportions that ONS provided us with for the breakdown of 78.10 were very different to those used in previous releases. This was probably because the 4 digit codes they are taken from are quite different in terms of the types of business they contain. In addition to television and theatrical casting, code 92.72 from SIC 2003 contains activities of parks and beaches and operation of coin-operated video games, whilst 78.10 in SIC 2007 contains all other activities of employment agencies, such as recruitment agencies. This may explain why 25% of 92.72 was taken previously, yet only 0.07% was taken this time. It was decided that because 78.10 is a large category in SIC 2007, taking a small proportion (0.07%) was still worthwhile.

11. Publishing

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
22.11	Publishing of books		58.11	Book publishing	
22.12	Publishing of newspapers		58.13	Publishing of newspapers	
22.13	Publishing of journals and periodicals		58.14	Publishing of journals and periodicals	
22.15	Other publishing	50%	58.19	Other publishing activities	50%
92.40	News agency activities		63.91	News agency activities	

This category is unchanged from previous releases in terms of what we include.

8 & 12. Software & Electronic Publishing
Digital & Entertainment Media

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
22.33	Reproduction of computer media	25%	18.20/3	Reproduction of computer media	25%
72.21	Publishing of software		62.01/2	Business and domestic software development	
72.22	Other software consultancy and supply		62.02	Computer consultancy activities	
			58.29	Other software publishing	
			58.21	Publishing of computer games	
			62.01/1	Ready-made interactive leisure and entertainment software development	

The biggest change is the splitting up of the original "Software, Computer Games and Electronic Media" category into 2 separate categories:

1. Software & Electronic Publishing
2. Digital & Entertainment Media

The main reason for this was to get a better idea of the contribution of the computer games industry to the economy. Indeed, this industry represents the vast majority of "Digital & Entertainment Media". Unfortunately, the SIC 2007 codes do not quite allow us to separate out this industry entirely, so there is still some other digital media activity in this category.

For "Software & Electronic Publishing", the dividing up of code 72.22 from SIC 2003 has improved our ability to measure this sector considerably. 72.22 has been split up into 3 codes in SIC 2007: 62.01, 62.02 and 62.09. Using the definition from the 2001 creative industries mapping document[1], we were able to drop 62.09 (Other information technology and computer service activities) from our definition, as it was clear that this did not belong in the Creative Industries. Category 62.09 consists of the following types of business:

- Computer disaster recovery services
- Installation (setting-up) of personal computers
- Software installation services

62.01 and 62.02 were then divided between "Software and Electronic Publishing" and "Digital and Entertainment Media" according to what was contained in them.

This change is significant in terms of its effect on GVA. If we measured Software in the same way that we did in 2007 (i.e. included code 62.09), then our estimate of the GVA that the Creative Industries account for would be just under 7%, much <u>higher</u> than previously. Therefore our ability to measure the Creative Industries more accurately (and exclude those businesses whose main activities are not creative) has actually led to our estimates falling.

Another useful improvement in the codes is the dividing up of "Publishing of software" into "Publishing of computer games" and "Other software publishing". This fits in well with our attempt to split up the overall category into two new ones, with "Publishing of computer games" fitting into "Digital and Entertainment Media", and "Other software publishing" fitting into "Software & Electronic Publishing".

As was the case for reproduction of video and sound recording, reproduction of computer media is now a 5 digit code in SIC 2007, whereas it was a 4 digit code in SIC 2003. This was not a problem where 5 digit data was available (i.e. for GVA), but where only 4 digit data was available for employment and number of businesses, we had to apply proportions to this 4 digit data using 5 digit ABS data on employment and businesses.

13. Radio and TV

SIC 2003		Proportion Taken	SIC 2007		Proportion Taken
92.20	Radio and television activities		60.10	Radio broadcasting	
			60.20	Television programming and broadcasting activities	
			59.11/3	TV programme production activities	
			59.12	Motion picture, video & TV post-production activities	81.6%
			59.13/3	TV programme distribution activities	

The change of SIC codes has also improved our ability to measure this sector. In SIC 2003 radio and TV could only be split out at the 5 digit level, whereas they now have their own 4 digit codes. TV programming and broadcasting are now also considered separately to production and distribution, and a new "post-production" category (59.12) is included for the first time.

Whilst a definite improvement in our ability to measure this sector, the inclusion of TV production and distribution in the same 4 digit category as motion picture and video production and distribution did pose a problem where we only had 4 digit data available. Therefore we calculated proportions using 5 digit ABS data on employment and number of businesses, and then applied these to 4 digit IDBR and LFS data for categories 59.11 and 59.13. In the case of GVA, we were able to directly use 5 digit data from the ABS for this.

Category 59.12 (Post-production activities) was not split up into 5 digit data in the same way that 59.11 and 59.13 were. This meant that that we were faced with a problem of how to calculate the proportion of 59.12 that related to TV post-production activities. We decided to calculate proportions based on the 5 digit breakdown of a closely related category (59.11 – Motion picture, video & TV programme production activities), and then apply these to 59.12.

Annex C – Further Notes

1. Data on Businesses

It should be noted that the data on the number of businesses in the Creative Industries refers to the number of <u>enterprises</u> in that particular SIC code, rather than the number of local units. For example, a chain of advertising units would only be counted as one business.

2. The Annual Business Survey (ABS) has incomplete coverage

The ABS covers about two-thirds of the UK economy, including production, construction, distribution, and service industries. In order to calculate the proportion of total UK GVA that the Creative Industries account for, the total GVA for the Creative Industries needs to be divided by the total GVA for the economy. We take the Creative Industries GVA from the ABS (by adding up all the relevant SIC codes), and the total GVA from the Blue Book of National Accounts. However, because the ABS does not have complete coverage of the economy, the total GVA in this is less than the total GVA from the Blue Book (which does have complete coverage).

In order to account for this we adjust the GVA figure from the Blue Book, scaling it down so that it accurately reflects the fact that the GVA figure for the Creative Industries comes from a data source that does not have complete coverage of all parts of the UK economy.

3. Some GVA figures used in our estimates are negative

The GVA for the 'television and radio' sector includes some activities that reported negative levels of approximate GVA in 2008. The ONS have explained that these levels – for components of classes 59.11 (Motion picture, video and television production) and 59.13 (Motion picture, video and television distribution) – were caused by low levels of turnover and high levels of purchases amongst some businesses.

The low turnover levels may be explained in part by the fact that businesses in this sector are now no longer required to report data on grants and donations in the ABI.

Annex D – Sources and References

1. **DCMS,** *Creative Industries Mapping Document* **(2001)**. Link

2. **ONS, Annual Business Survey (ABS)**
   Formerly known as the Annual Business Inquiry (ABI), estimates from this survey cover all UK businesses registered for VAT and/or PAYE. The ABS collects data on a sample of businesses from the Inter-Departmental Business Register (see below), and uses 2007 Standard Industrial Classification (SIC) codes. For more information on the ABS see ONS website - ABS.

3. **ONS, Inter-Departmental Business Register (IDBR)**
   The IDBR is the comprehensive list of UK businesses that is used by government for statistical purposes. It covers all parts of the economy, with the exception of some very small businesses (self-employed and those without employees and low turnover) and some non-profit making organisations. This affects some Creative Industry sectors (such as Crafts) more than others, due to the high proportion of small businesses within them. The IDBR uses 2007 SIC codes. For more information on the IDBR see ONS website - IDBR.

4. **ONS, Labour Force Survey (LFS)**
   The LFS is a quarterly sample survey of households living at private addresses in Great Britain. Its purpose is to provide information on the UK labour market that can then be used to develop, manage, evaluate and report on labour market policies. The LFS uses 2007 SIC codes and 2000 SOC codes. For more information on the LFS see ONS website - LFS.

5. **ONS, International Trade in Services (ITIS)**
   The ONS conducts an inquiry into international transactions of companies offering business services. For more information on ITIS see ONS website - International Trade. The figures used in this bulletin are specially commissioned from ONS by DCMS. The ITIS uses 2003 SIC codes.

6. **The Value of the UK Fashion Industry, British Fashion Council**
   This report attempts to estimate the value of the UK fashion industry to the economy, both in terms of GVA and employment. It looks at many wider impacts of fashion, and uses a much broader definition of the industry than our estimates. For more information see Value of UK Fashion Industry Report.

7. **Design Industry Valuation Survey, British Design Innovation**
   This is an annual survey undertaken by British Design Innovation, based on over 4,000 BDI registered design agencies. The figures used for design exports in this release came from this. For more information see Design Industry Valuation Survey.

8. **Antiques Trade Gazette**
   The figure for art & antiques exports used in this release was produced by the Gazette, using analysis of HM Revenue and Customs data. It covers UK exports to both EU and non-EU countries.