

SOUTH AFRICAN CULTURAL OBSERVATORY

**Economic Mapping Study Research
Services to Nelson Mandela University**

**Technical Research Report 2:
Cultural and Creative Industries Updated
Satellite Account Embedded into a Social
Accounting Matrix for South Africa
2019/2020**

NELSON MANDELA
UNIVERSITY

In Partnership with:
Rhodes University, University of Fort Hare and University of KwaZulu-Natal



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Economic Mapping Study Research Services

**Technical Research Report 2:
Cultural and Creative Industries Updated Satellite
Account Embedded into a Social Accounting
Matrix for South Africa**

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ACRONYMS

AFS	:	Annual Financial Statistics
CCI	:	Cultural and Creative Industries
CPC	:	Central Product Classification
CSA	:	Cultural Satellite Accounts
CSAM	:	Cultural SAM
CFCS	:	Canadian Framework for Culture Statistics
DET	:	Department of Education and Training
DSAC	:	Department of Sports, Arts and Culture
DTI	:	Department of Trade and Industry
EBOPS	:	Extended Balance of payment Services Classification
FCS	:	2009 UNESCO Framework for Cultural Statistics
GDP	:	Gross Domestic Product
GVA	:	Gross Value Added
HS	:	Harmonised Commodity Description and coding system
ICATUS	:	Intelligent Classification of Activities for Time Use Statistics
ICH	:	Intangible Cultural Heritage
ICT	:	Information and Communication Technology
ILO	:	International Labour Organisation
IO	:	Input Output Table
IP	:	Intellectual Property
ISCO	:	International Standard Classification of Occupations
ISIC	:	International Standard Industrial Classification
MEIA	:	Macroeconomic Impact Assessment Model
NMMU	:	Nelson Mandela Metropolitan University
OECD	:	Organisation for Economic Co-operation and Development
OFO	:	Organising Framework for Occupation
RSA	:	Republic of South Africa
SAM	:	Social Accounting Matrix
SACO	:	South African Cultural Observatory
SASCO	:	South African Standard Classification of Occupations
SIC	:	Standard Industrial Classification
SNA	:	System of National Accounts
SU	:	Supply and Use Tables
StatsSA	:	Statistics South Africa
TSA	:	Tourism Satellite Accounts
UIS	:	UNESCO Institute for Statistics
UN	:	United Nations
UNCTAG	:	United Nations Conference on Trade and Development
UNESCO	:	United Nations Educational, Scientific & Cultural Organisation
QLFS	:	Quarterly Labour Force Survey



1. Introduction and Background

This report is an updated version of the original **Research Report 2: Cultural and Creative Industries Satellite Account Embedded into a Social Accounting Matrix for South Africa** that was produced in December 2017, and which was the second in a series of five reports that were produced in 2017 in response to a specific request from the Department of Arts, Sports and Culture (DSAC) and the South African Cultural Observatory (SACO) that the scope of work and deliverables for this research study be presented in five separate reports.

This current study is conducted under the auspices of the Nelson Mandela University in partnership with Rhodes University, University of Fort Hare, and the University of KwaZulu-Natal.

1.1 Scope of Work of the 2019 Study

Table 1.1 below reflects the scope of work undertaken in this 2019 study, as well as the names of the reports produced as part of the overall study.



Table 1.1: Scope of Work and Research Reports

Scope of Work	Research Report
1. Inception Report	Research Report 1: Summary of Work Undertaken
2. Macroeconomic Impact Analysis: - The contribution of the CCIs towards GDP (economic output), as well as demonstrating the relative size of the CCIs sector in relation to other economic sectors across the UNESCO defined domains - An estimation of the forward and backward linkages (multipliers) in the CCIs sector itself, as well as linkages with other economic sectors	Research Report 2: Updating a Cultural and Creative Industries Satellite Account Embedded into a Social Accounting Matrix for South Africa. - Technical Report - Summary / Abstract Report Research Report 3: Macroeconomic Impact Assessment Modelling System and Macroeconomic Impact Analysis of the Cultural and Creative Industries Sector - Technical Report - Summary / Abstract Report
3. Provincial, Location and Cluster Analysis: - Provincial distribution of the CCIs (as per the macro-economic analysis stated above – this section should include maps detailing provincial distribution patterns) - Identification of possible clusters within the CCIs (this should include maps pertaining to the relevant findings) - Transformation and ownership levels from a provincial perspective, and - Employment from a provincial and geo spatial spread, i.e. mapping exercise & GIS Mapping	Research Report 4: Provincial Location and Clusters of the Cultural and Creative Industries Sector in South Africa - Technical Report - Summary / Abstract Report
4. Shifting Transformation and Ownership Analysis: Determine the transformation and ownership patterns within the South African CCIs across the UNESCO domains, noting that transformation and ownership levels must also be presented in the above-mentions section dealing with provincial distribution and clustering	Research Report 5: Transformation, Ownership and Employment in the Cultural and Creative Industries - Technical Report - Summary / Abstract Report

1.2 Key Deliverables of the 2017 Study

Two of the key deliverables of the 2017 study were a Cultural and Creative Industries Satellite Account (CSA) for South Africa, and a Cultural and Creative Industries Social Accounting Matrix-based Macroeconomic Impact Assessment Model (MEIAM).

In order to provide these deliverables, Conningarth Economists compiled a Social Accounting Matrix (SAM) that incorporates an internal Satellite Account (CSA) for the South African CCI sector. This CCI SAM, along with its internal CSA, was then incorporated into a proprietary Macroeconomic Impact Assessment Modelling System (MEIAM) that will enable the DAC and SACO to subject future CCI policy implementation programs to comprehensive macroeconomic impact assessment as part of its decision-making processes.



1.3 Updating the 2017 Cultural and Creative Industries CSA and SAM-based MEIAM to 2018 Prices

Updating the CSA and MEIAM compiled in 2017 has involved incorporating 2018 data into this integrated modelling system and updating the various multipliers inherent in a SAM. A later section of this report describes the various data sources used to obtain the latest available data for the model updating exercise.

1.4 Report Structure

This updated CSA and SAM-Based MEIAM report continues to include the full sections that describe the process used to compile the CCI CSA compiled in 2017 and to update it to 2018 prices (see Section 2: Compiling a Cultural and Creative Industries Satellite Account for South Africa); as well as the process used to compile the 2016 CCI SAM and update it to 2018 (see Section 3: Compiling a Cultural and Creative Industries Social Accounting Matrix for South Africa).

The reason for including the complete text for Sections 2 and 3 is to provide readers with a comprehensive description of the processes used to compile an updated CCI SAM for South Africa that incorporates an internal CCI CSA. Section 4 presents the results produced by the updated 2018 CCI CSA for South Africa.

It is important to note that, during the Project Close-Out phase, a comparison of the results reflected in this updated CCI CSA and SAM report will be made with the results reflected in the original 2017 report. As such, the structure and layout of the tables and figures contained in this report is exactly the same as that used in the 2017 report.



2. Compiling a Cultural and Creative Industries Satellite Account for South Africa and Updating it to 2018

2.1 Introduction to Cultural Satellite Accounts

If information regarding a specific sector in the economy is required, economist and researchers will typically think in terms of sectors as defined in the System of National Accounts. This System was developed in the 1930s and 1940s and has international backing. Newer versions have been developed over the years as needs and the economic environment changed. Nonetheless, there are sectors of interest in the economy, such as the Cultural and Creative sector, which are not separately included or not included at all in the System of National Accounts.

The cultural and creative industry is viewed as be defined by cultural and creative and non-cultural and creative industries alike. The key from a measurement point of view is associating its purchases to the total supply of those goods and services within a country. The fundamental structure of the CSA therefore relies on the balance existing within the economy between, on the one hand, the demand for goods and services generated by the cultural and creative activities, and on the other hand, the supply of such goods and services.

There are many elements of the cultural and creative sector that pose serious measurement issues: much of the sector is supported by volunteers whose labour is not directly valued like other types of labour in the labour market. Cultural activity also occurs in firms whose main activity is other than purely cultural, such as businesses having their own library as a supporting activity.

To overcome some of the data deficiencies researchers use allocation factors, input-output multipliers and the development of satellite accounts. Allocation factors rely on finding an external source which gives an indication of the portion of a national accounts sector that is culture-related. Such data may come from such sources as financial statistics, data on products, employment categories, trade data and other appropriate aspects from which usable data can be derived. The researcher then assumes a certain level of homogeneity within the broader class of data (that is the national accounts data and other relevant data) and may discern various relationships which may exist between specific aspects of culture and variables pertaining to other economic activity. In this way an allocation factor may be obtained from an aspect of the broader data set to an aspect of interest in the satellite account.

Multipliers derived from input-output tables highlight the relationships that exist between industries and can be used to determine the likely impact on an economy following a change in a specific industry. This may provide useful information on inter-relationships in the economy.

Satellite accounts are part of the broad grouping of input-output and SAM models. A satellite account is a term developed by the United Nations to measure the size of sectors that are not defined as industries in the National Accounts. Examples of such sectors are the tourism sector and the ITC sector, and for purposes of this study, the cultural and creative sector. These sectors are typically an amalgamation of industries – for example the cultural and creative sector is a mixture of sectors such as business services, professional services, trade sector and others. The underlining assumption then is that the cultural and creative sector can be extracted from the national account sectors and be seen as a separate industry in the economy.



A major advantage of a satellite account is that it is a statistical instrument designed to measure these good and services according to international standards of concepts, classification and definitions (the System of National Accounts) which will allow valid comparisons with other industries or even other countries. Such studies will thus be comparable with international recognised economic statistics. A well-designed and executed CSA will provide:

- Credible data on the impact of culture and creative industry on the economy
- A standard framework for organising relevant data
- A methodology to examination of intra cultural sectors linkages
- An instrument for designing economic policy and evaluating its effectiveness and efficiency.

The CSA was incorporated or imbedded into the SAM, which in turn be used to shock a macro economic impact model. The results obtained from this analysis will be in the form of a number of indicators, such as the impact on GDP, employment, households and the fiscus, which will provide a picture of the impact of the sector on the broader economy.

2.2 Structure of the Cultural and Creative Industries Satellite Account for South Africa

In the update of the CSA for South Africa, Conningarth still made use of the 2009 UNESCO Framework for Cultural Statistics (FCS) that was developed as a tool for organising cultural statistics on a national and international level. As indicated in the Executive Summary of the UNESCO Institute for Statistics FCS document (UIS/TD/09-03), the FCS *'is based on a conceptual foundation and a common understanding of culture that will enable the measurement of a wide range of cultural expressions irrespective of the particular economic and social mode of its production'*. This document goes on to state further that the FCS *'is a tool and methodology designed for use at the international and national levels as a basis for organising the collection and dissemination of cultural statistics. It attempts to reflect the widest range possible of activities related to the production, distribution and use of culture close'*.

The figure below reflects the structure of the CSA as used by Conningarth in this study. This framework is based on the SIC 7 classification system used by StatsSA, which in turn is based on the UNESCO ISIC 4.1 system published in 2008 that incorporates a number of adaptations for local conditions. The figure reflects the seven main **Cultural Domains** that measure cultural activities and goods and services that are generated by industrial and non-industrial processes; and the **Cultural and Creative Industry Activities** that may be an end in themselves, or may contribute to the production of cultural goods and services.



Figure 2.1: Structure of the Cultural Satellite Account for South Africa

Cultural Domains	SIC 7/ ISIC 4.1	Cultural and Creative Industry Activities
A. Cultural & Natural Heritage	9000	Creative, Arts & Entertainment Activities
	9102	Museums Activities & Operation of Historical Sites & Buildings
	9103	Botanical & Zoological Gardens & Nature Reserves Activities
	4774	Retail Sale of Second-Hand Goods
B. Performance & Celebration	9000	Creative, Arts & Entertainment Activities
	3220	Manufacture of Musical Instruments
	5920	Sound Recording & Music Publishing Activities
	4762	Retail Sale of Music & Video Recordings in Specialized Stores
C. Visual Arts & Crafts	9000	Creative, Arts & Entertainment Activities
	7420	Photographic Activities
	5819	Other Publishing Activities
	3211	Manufacture of Jewellery & Related Articles
D. Books & Press	7220	Research & Experimental Development on Social Sciences & Humanities
	9101	Library & Archives Activities
	5811	Book Publishing
	5813	Publishing of Newspapers, Journals & Periodicals
	5819	Other Publishing Activities
	4761	Retail Sale of Books, Newspapers & Stationary in Specialized Stores
	6391	News Agency Activities
	6399	Other Information Service Activities N.E.C.
	4649	Wholesale of Other Household Goods
	9000	Creative Arts & Entertainment Activities
E. Audio-Visual & Interactive Media	5820	Software Publishing
	5911	Motion Picture, Video & Television Programme Production Activities
	5912	Motion Picture, Video & Television Programme Post- Production Activities
	5913	Motion Picture, Video & Television Programme Distribution Activities
	5920	Sound Recording & Music Publishing Activities
	5914	Motion Picture Projection Activities
	6010	Radio Broadcasting
	6020	Television Programming & Broadcasting Activities
	6312	Web Portals
	7722	Renting of Video Tapes & Disks
	6391	News Agency Activities
	4762	Retail Sale of Music & Video Recordings in Specialized Stores
	4791	Retail Sale Via Mail Order Houses or via the Internet
	7410	Specialized Design Activities
F. Design & Creative Services	7110	Architectural & Engineering Activities & Related Technical Consultancy
	7310	Advertising
Transversal Cultural Education Domain	8522 & 8530	Technical and Vocational Secondary Education; and Higher Education

It should be noted that, in dealing with the transversal Cultural Education domain, the Technical and Vocational Secondary Education and Higher Education activities have been combined for practical purposes.



2.2.1 Embedding the CSA for South Africa into a Cultural and Creative Industries Social Accounting Matrix

A Social Accounting Matrix (SAM) differentiates between Activities and Commodities. As such, the CSA compiled in this study also reflects CCI Activities and Commodities separately (see Figure 3.1 below). Conningarth is of the opinion that embedding the Cultural Domains and associated Cultural Activities and Commodities into the top left-hand corner of the CCI SAM as an internal CSA makes these industries more easily visible; and, more importantly, provides a comprehensive view of the intra-connectedness of the CCIs industries in terms of their value chain connections (i.e. creation/production/manufacturing, followed by dissemination, followed by distribution).

It is important to recognize that, in disaggregating CCI Activities out of other SIC sectors, care has been taken to ensure that double-accounting is meticulously avoided.

2.3 Primary Data Sources Used to Update the CSA to 2018

The primary data sources used in updating the CSA developed in the 2017 study to incorporate the latest available 2018 data include:

- The 2018 Annual Financial Statistics (AFS) report (Statistical Release P0021) published by StatsSA
- The Supply and Use Tables, 2010 (Report 04-04-03) published by StatsSA
- The Final Social Accounting Matrix, 2011 (Report 04-03-02) published by StatsSA
- The Income and Expenditure of Households Survey, 2010/11 published by StatsSA
- The Labour Market Dynamics 2017 (Report No. 02-11-02) published by StatsSA, and
- The September 2019 Quarterly Bulletin published by the South African Reserve Bank

In all cases, data derived from these sources has been adjusted to 2018 prices using appropriate growth rates for the main economic sectors derived from the September 2019 SARB Quarterly Bulletin.

These data sources are similar to those described by Haines and Mnguni in their 2016 report where they note: *'much, although not all, of the data (required to compile a CSA) is already being collected in one way or another by StatsSA. Unfortunately, the format in which it is being collected may not be aligned to the required (ments) of a CSA'*¹.

2.4 Methodology

In compiling the CSA, a bottom-up approach has been applied. The first step involves deriving the CCI activities out of the various SIC sectors where they have previously been accounted for, using both direct and indirect extraction methods.

¹ Haines, R, and Mnguni. 2016. A position paper on the nature, requirements and operationalisation of a Satellite Cultural Account for South Africa. DAC and SACO.



The process of deriving the CCIs has two focuses. Firstly, establishing the Rand-value magnitudes of the CCIs in terms of variables such as production, capital and labour usage, etc.; and, secondly, deriving the structures of the CCIs in terms of how they link backwards and forwards to other SIC sectors. The backward linkages reflect purchases from upstream sectors that supply intermediate production inputs, and the usage of production factors such as capital and labour. On the other hand, forward linkages reflect the sale of production outputs in the form of intermediate products and services sold to downstream businesses in other sectors, and final products and services sold to households and Government; as well as capital products for investment purposes. It is important to note that these backward and forward linkages include links between CCIs themselves (intra-linkages), and with other non-CCIs sectors (interlinkages).

2.4.1 Establishing the Magnitude of the Cultural and Creative Industries

There are two methods for establishing the magnitude of the CCIs, namely, the Direct Method, and the Indirect Method.

The Direct Method involves using SIC sector Production/Turnover as a measure of the magnitude of the CCIs. There are two approaches that can be used in applying the Direct Method. Firstly, where a CCI corresponds directly with a SIC sector, the full 100% amount of the SIC sector's Production can be used as the CCI's production. In cases where the CCI represents only a portion of the SIC's Production, it is necessary to derive an appropriate portion of the SIC sectors Production by making use of secondary data sources.

The Indirect Method is used in cases where it is difficult to establish the proportion that a specific CCI represents of a SIC sector. In these cases, it is necessary to establish where the output of the CCI is used as an input to the production process of a SIC sector. An example of this is the contribution that fashion designing makes to the process of producing clothing. In an Input-Output (IO) table, the demand for intermediate inputs for the production of clothing includes Business Services, which is mostly made up of the CCI activity of fashion designing for clothing. As such, a portion of the value of Business Services reflected in the IO Table as an intermediate input in the clothing sector is used to establish the magnitude of the CCI clothing fashion design activity in the CSA.

Bearing in mind that ISIC 7410 Specialised Design Activities includes other types of design activities, i.e. graphic design, interior design, landscape design, etc. The same approach is used to establish the magnitude of these other CCI design activities within the SIC sectors that include design activities as an intermediate input to their production processes. The adding together all of these intermediate design activities results in a total production figure for the total ISIC 7410 Specialised Design Activity.

The table below indicates how the Direct and Indirect Methods have been applied in establishing the magnitude of the various CCIs included in the CSA compiled in this study. Of the 39 CCI activities incorporated into the CSA, 7 correspond directly with AFS 2018 SIC sectors; 26 have a less than 100% direct correspondence with AFS 2018 SIC sectors; 4 have a less than 100% direct correspondence with the Income and Expenditure of Households Survey (HI&E); 1 has a less than 100% direct correspondence with the Supply and Use Table; 1 has a less than 100% direct correspondence with the September 2019 SARB Quarterly Bulletin; and only one CCI activity - ISIC 7410 Specialised Design Activities required an indirect method in order to establish its magnitude.



The percentages reflected in the Direct Method (less than 100% correspondence) and Indirect Method columns of the table below reflect the proportion of production associated with the various secondary sources of information (i.e. AFS 2018 ISIC sectors, HI&E categories, and S-U Table sectors) that has been incorporated into the CCI activities in the CSA. The percentages have been determined using a Delphi technique after having examined other secondary data sources.



Figure 2.2: Methodologies Applied to Establish the Magnitude of Production in the CCI Activities Included in the CSA

Cultural Domains	SIC 7/ ISIC 4.1	Cultural and Creative Industry Activities	Direct Method (100% Correspondence)	Direct Method (less than 100% Correspondence)	Indirect Method
A. Cultural & Natural Heritage	9000	Creative, Arts & Entertainment Activities		AFS: 6239: Other retail trade in specialized store. Trade Margin - 1%	
	9102	Museums Activities & Operation of Historical Sites & Buildings	SANParks Annual Report 2018	AFS: 2018	
	9103	Botanical & Zoological Gardens & Nature Reserves Activities		HCS: Museums and Zoo's-80%; Government Subsidy	
	4774	Retail Sale of Second-Hand Goods	AFS 6240: Retail trade in second-hand goods in stores		
B. Performance & Celebration	9000	Creative, Arts & Entertainment Activities	AFS 9614: Dramatic arts, music and other arts activities;	AFS:9649: Other recreational activities-30%; Government Subsidy	
	3220	Manufacture of Musical Instruments		AFS: 3922; 3930: Manufacture of musical instruments; other manufacturing n.e.c.- 1%	
	5920	Sound Recording & Music Publishing Activities		AFS: 3243; 3249: Publishing of recorded music; other publishing - 30%	
	4762	Retail Sale of Music & Video Recordings in Specialized Stores		HI&E: VCDs (excluding software and video games; including pre-recorded and unrecorded VCDs)-10%/DVDs (excluding software and video games, including pre-recorded and unrecorded DVDs)-10%/Compact disks- CDs (excluding software and video games; including pre-recorded and unrecorded disks) -10%	
C. Visual Arts & Crafts	9000	Creative, Arts & Entertainment Activities		AFS: 3922; 3930: Manufacture of musical instruments; other manufacturing n.e.c. - 1%	
	7420	Photographic Activities	AFS: 8894: Photographic activities		
	5819	Other Publishing Activities		Conningarth RSA SAM:Printing-6%	
	3211	Manufacture of Jewellery & Related Articles	AFS: 3921; Manufacture of jewelry and related articles		
	7220	Research & Experimental Development on Social Sciences & Humanities	AFS: 8720; Research and experimental development on social sciences and humanities		
D. Books & Press	9101	Library & Archives Activities	AFS: 9631; 9632; 9633; Library and archives activities; museum activities and preservation of historical sites and buildings; botanical and zoological gardens and nature reserve activities		
	5811	Book Publishing		Conningarth RSA SAM: Printing - 73%	
	5813	Publishing of Newspapers, Journals & Periodicals	AFS: 3242; Publishing of newspapers, journals and periodicals		
	5819	Other Publishing Activities		Conningarth RSA SAM: Printing - 4%	
	4761	Retail Sale of Books, Newspapers & Stationary in Specialized Stores		HI&E: Magazines and periodicals – 67 %; newspapers - daily weekly – 67 %; Books – 67 %	
	6391	News Agency Activities		AFS: 9619; 9620; Other entertainment activities n.e.c.; news agency activities - 44%	
	6399	Other Information Service Activities N.E.C.		AFS: 9619; 9620; Other entertainment activities n.e.c.; news agency activities -18%	
	4649	Wholesale of Other Household Goods		HI&E: Magazines and periodicals -33%; Newspapers - daily weekly-33%/Books -33% (Trade Margin)	
	9000	Creative Arts & Entertainment Activities		AFS: 9909; Other service activities n.e.c.- 2%	
E. Audio-Visual & Interactive Media	5820	Software Publishing		AFS: 862; Software consultancy and supply – 50%	
	5911	Motion Picture, Video & Television Programme Production Activities		AFS: 9613; Radio and television activities -10%; 9611; Motion picture and video production and distribution - 80%	
	5912	Motion Picture, Video & Television Programme Post- Production Activities		AFS: 9613; Radio and television activities - 5%; 9611; Motion picture and video production and distribution -10%	
	5913	Motion Picture, Video & Television Programme Distribution Activities		AFS: 9613; Radio and television activities - 5%; 9611; Motion picture and video production and distribution -10%	
	5920	Sound Recording & Music Publishing Activities		AFS: 3243; 3249; Publishing of recorded music; other publishing - 70%	
	5914	Motion Picture Projection Activities	AFS: 9612; Motion picture projection		
	6010	Radio Broadcasting		AFS: 9613; Radio and television activities - 39%	
	6020	Television Programming & Broadcasting Activities		AFS: 9613; Radio and television activities - 41%	
	6312	Web Portals		AFS: 862; Software consultancy and supply – 4.5%	
	7722	Renting of Video Tapes & Disks	HCS: Renting of tapes		
	6391	News Agency Activities		AFS: 9619; 9620; Other entertainment activities n.e.c.; news agency activities - 21%	
	4762	Retail Sale of Music & Video Recordings in Specialized Stores		HI&E: VCDs (excluding software and video games; including pre-recorded and unrecorded VCDs) - 90%; DVDs (excluding software and video games, including pre-recorded and unrecorded DVDs) - 90%; Compact disks- CDs (excluding software and video games; including pre-recorded and unrecorded disks) - 90%	
	4791	Retail Sale Via Mail Order Houses or via the Internet		AFS: 6251; 6252; 6259; Retail trade via mail order houses; retail trade via stalls and markets; other retail trade not in stores -3%	
F. Design & Creative Services	7410	Specialized Design Activities			AFS 3112: Finishing of textiles -1%; 3121: Manufacture of made-up textile articles, except apparel - 3%; 3130: Manufacture of knitted and crocheted fabrics and articles - 3%; 3140/3150: Manufacture of wearing apparel; dressing and dyeing of fur; manufacture of articles of fur - 2%; AFS 8831: Advertising - 11%; 8862: Software consultancy and supply - 5%; 3241: Publishing of books, brochures, musical books and other publications - 12%; 3242: Publishing of newspapers, journals and periodicals - 12%; 3243; 3249: Publishing of recorded music; other publishing - 34%; 9611: Motion picture and video production and distribution - 24%; 9613: Radio and television activities - 8%
	7110	Architectural & Engineering Activities & Related Technical Consultancy		AFS: 8821; Architectural and engineering activities and related technical consultancy -50%	
	7310	Advertising	AFS: 8831; Advertising		
Transversal Cultural Education Domain	8522 & 8530	Technical and Vocational Secondary Education; and Higher Education		SARB QB: Education and other training services - 5%	



2.4.2 Establishing the Backward (Input) and Forward (Output) Linkages

This section describes the methodology used for establishing the backward linkages that exist between the CCI activities and the upstream CCI activities and other non-CCI SIC sectors that supply intermediate inputs to them; and the forward linkages that exist between the CCI activities and the various downstream intermediate and end users of the CCI products and services produced by them.

2.4.2.1 Establishing Backward Linkages

The 1st step in the process of establishing the backward linkages involved determining the value of intermediate inputs applicable to each CCI activity. This process involves a number of sub-steps:

- Firstly, CCI activity production turnovers are disaggregated into the following components using data derived from the AFS 2018 report published in November 2019:
 - Intermediate inputs/All Products & Services/ Operating Expenditure
 - Labour Remuneration (Salaries & Wages)
 - Gross Operating Surplus
 - Government Indirect Tax, and
 - Government Subsidies

Using this data, a percentage-based distribution structure was calculated for each AFS SIC Sector that is relevant to the CCI activities - see figure 2.2 above for details of the correspondence between CCI activities and AFS SIC sectors

- The 2nd sub-step involves using the percentage-based distribution structures to calculate the total value of intermediate inputs for each CCI activity

The 2nd step involved determining the proportion of each CCI activity's total intermediate input value that was purchased from other CCI activities (intra-linkages). The table below reflects an example of this calculation where Creative, Arts and Entertainment Activities is buying inputs from Botanical and Zoological Gardens and Nature Reserve Activities.

Table 2.1: Example of Calculation of Intra-Linkages

	Creative, Arts and Entertainment Activities					Total Weights
	Sub-sector	Stamps, Mineralogical & Coins	Zoological, Botanical & Anatomical	Historical & Ethnographic	Antiques (Furniture)	
	Weight	0.16	0.17	0.20	0.47	1.00
Botanical and Zoological Gardens Services	0.29	0%	2%	0%	0%	0.1%
Nature Reserve Services	0.71	0%	2%	0%	0%	0.24%
Total Weights	1.00					0.34%

Calculations are performed on a detailed CCI product/service basis, i.e. Creative, Arts and Entertainment Activities is broken down into 4 major product/service categories, i.e. Stamps,



Mineralogical & Coins; Zoological, Botanical and Anatomical products and services, Historical & Ethnographic products and services, and Antiques (Furniture). The weightings reflect the relative importance of each product/service category. Weightings were determined using a Delphi technique.

The table above indicates that, in order to produce Zoological, Botanical & Anatomical products, Creative, Arts and Entertainment Activities will purchase 2% of total intermediate inputs from Botanical and Zoological Gardens Services, and 2% from Nature Reserve Services. It is important to note that there is no intermediate purchasing activity between Creative, Arts and Entertainment Activities and Botanical and Zoological Gardens and Nature Reserve Activities as regards the production of products/services such as Stamps, Mineralogical & Coins, Historical & Ethnographic products and services, and Antiques (Furniture). Once the weightings have been applied to these percentages, only 0.34% of Creative, Arts and Entertainment Activities' total intermediate inputs are purchased from Botanical and Zoological Gardens and Nature Reserve Activities.

This same procedure is performed for Creative, Arts and Entertainment Activities and all of the other CCI activities, which generates a series of intra-CCI intermediate input purchase percentages. Adding these intra-CCI percentages together over the rows of the matrix results in a total percentage figure that reflects the proportion of total Creative, Arts and Entertainment Activities' intermediate input purchases that are purchased from other CCI activities.

The 3rd step involves converting the intra-CCI intermediate input percentages to a percentage out of 100% and applying this adjusted percentage to the value of intermediate inputs purchased from other CCI activities for each CCI activity.

The 4th step involves subtracting the total intra-CCI percentages from 100%, which yields the percentage of total intermediate inputs that Creative, Arts and Entertainment Activities purchases from all other non-CCI sectors. This percentage figure is then applied to the intermediate input value figures for each CCI activity to derive the total value of intermediate inputs purchased from non-CCI sectors.

The 5th step involves apportioning this figure to all of the other non-CCI sectors, using the following sub-steps:

- Firstly, the various CCI activities were matched with corresponding S-U Tables SIC sectors. In many cases, it was possible to match CCI activities with a single SIC sector in the S-U Tables. However, there were a number of instances where CCI activities were matched with more than one S-U Tables SIC sector. In these instances, a weighted average for the relevant S-U Table SIC sectors was calculated
- The 2nd sub-step involved calculating a percentage-based distribution structure for the intermediate inputs associated with each S-U Table SIC sector, and
- the 3rd sub-step involved applying this percentage-based distribution structure to each CCI activity's intermediate input value associated with all other non-CCI SIC sectors (see step 4 above) to calculate an intermediate input value for each of these non-CCI sectors for each CCI activity.

2.4.2.2 Establishing Forward Linkages

In order to establish the value of CCI products/services (output) sold to other CCI activities and all other non-CCI final demand components, fundamentally the same approach as that described above for establishing the backward linkages has been followed.



The Use Table was used to determine the value of sales/output to the main components, i.e. sales to domestic businesses (both CCI and non-CCI) that use CCI products/services as intermediate inputs to their production processes; as well as sales/output to final end-users such as household and government consumption expenditure, capital formation, and exports.

In calculating the value of sales of intermediate products/services between CCI activities, the same matrix as described above was used to determine a percentage-based distribution structure that was applied to total demand values for each CCI activity to calculate intra-CCI sales values, as well as sales values for the other components.

In applying the matrix to calculate the intra-CCI intermediate input values, matrix percentages were multiplied with the total CCI intermediate input values to obtain values. This resulting values matrix was then used to determine the split between intermediate input sales between CCI and non-CCI activities, as well as to determine the percentages amongst the various CCI activities.

To determine the inter-CCI intermediate input values, a Delphi technique was used taking into account the producers (sellers) and the demand side buyers (intermediate and final demand) for the entire commodities of the CCI's. In essence, with matrix algebra applied, the intermediate demand of the CCI's and non-CCI's on an activity and commodity base to reflect a representative economic impact constituted by the CCI-economy.

It is important to note that CCI exports are actual figures that are determined separately (see below), which is subtracted from the total demand figure. The remainder is then distributed between the intermediate and the rest of the final demand components.

2.4.3 Establishing the Value of South Africa's Trade in CCI Goods and Services

This study has used two methods for determining the value of CCI goods and services imports and exports. The first method uses an approach based on the international trade of cultural goods and services defined with the Harmonised System 2007 codes as set out in Table 3 of the 2009 UNESCO Framework for Cultural Statistics document (pages 65 to 73); whilst the second method uses import and export data derived from the SIC sectors in the S-U Tables that correspond to the CCI activities included in the CSA.

In applying the approach based on the Harmonised System (HS) codes, the following steps were applied:

- The first step involved sourcing South African import and export values from the Trade Map website, using six-digit HS codes. This data relates mostly to the import of goods rather than services
- The second step involved corresponding the six-digit HS codes with the CCI activities - this was done in accordance with the UNESCO recommendations – see Table 3 in the UNESCO document
- The third step involved sourcing South African import and export values for services income and transfer receipts and payments from the September 2019 SARB Quarterly Bulletin. The specific categories of services of interest for this study were: travel other; charges for the use of intellectual property; telecommunications, computer and information services; personal, cultural and recreational services; other business and miscellaneous services, specifically advertising and market research services, and architectural,



engineering and other technical services. Each of these categories of services were then further analysed according to the following sub-steps:

- The first sub-step involved determining the portion of each category of service that is associated with CCI activities. This involved using secondary data sources for each service category, i.e. the Tourism Satellite Account for travel other, Royalties, franchise fees, copyright, trade names, trademarks and patent rights data from the AFS report for intellectual property charges, telecommunications and software consultancy and supply data from the AFS report for telecommunications, computer and information services, AFS data for the personal, cultural and recreational services, AFS data for advertising services, and AFS data for architectural and design services
- The second sub-step involved disaggregating the service category import and export values to each of the separate CCI activities. This was done using a percentage-based distribution structure derived from the CCI activities production turnover that was calculated as described above
- The fourth step involved adding together the import and export values derived for goods and services to arrive at a total import and export value for each CCI activity included in the CSA

The second method used to calculate the value of CCI activity imports and exports that is based on data derived from the S-U Tables involved the following steps:

- Firstly, imports and exports were calculated as a percentage of total production for each of the S-U Tables SIC sectors that are associated with the various CCI activities included in the CSA (see Figure 2.2 above for these correspondences)
- The 2nd step involved applying these percentages to the production turnover figures calculated for each CCI activity to determine an import and an export value for each CCI activity

The CCI activity import and export values derived from the two methods described above were then compared with each other and a final import and export value was derived for each CCI activity using a weighted average calculation, where the weights for the two methods were determined by using a Delphi technique.

2.4.4 Capital

The value of Capital for each CCI has been determined using capital/production ratios, which have been calculated using two different approaches.

The first approach involved using (production) turnover figures and total asset values derived from the AFS report for each of the SIC sectors that are associated with the CCI activities included in the CSA compiled in this study, using the same approach as that used to determine production figures for each CCI activity described above. The resulting production and asset values were then used to calculate a capital/production ratio for each CCI activity. It is important to note that AFS asset values are based on data sourced from SARS, which means that they are based on historical prices that have been depreciated. As such, these AFS asset values are an under-estimation of the real value of CCI assets.



The second approach involved using capital/production ratios calculated by Conningarth in compiling an updated 2018 National SAM where detailed sectoral capital and production values were used that were balanced with National Accounts Fixed Capital Stock figures reflected in the SARB Quarterly Bulletin, which are based on 2018 asset replacement values.

The capital/production ratios that were calculated using the two methods described above were compared with each other and adjusted using a weighting system. The adjusted ratios were then applied to each CCI activity's production figures to arrive at a capital figure for each CCI activity.

2.4.5 Labour

Labour force numbers have been determined for each CCI activity using labour/production ratios. These ratios were calculated based on SIC sector labour force data derived from the report published from StatsSA namely the Labour Market Dynamic Survey 2017 and production figures derived from the AFS report, after the SIC data from these two sources had been brought into alignment with the CCI activities using the same approach for this alignment as that used to align SIC sectors and CCI activities described above.

It is important to note that the Quarterly Labour Force Survey of for 2018 is available from StatsSA. The Labour Market Dynamic Survey however is published per annum and there is always a one-year time lag regarding its publication. As the requirements for this study is based on detailed industries and thus preserving the quality of the dataset required, the Labour Market Dynamic Survey for 2017 was used determining labour multipliers.

The following section describes the process of compiling a Cultural and Creative Industries SAM (CCI SAM) for South Africa.



3. Compiling a Cultural and Creative Industries Social Accounting Matrix for South Africa and Updating it to 2018 Prices

3.1 Introduction to the Social Accounting Matrix

A Social Accounting Matrix (SAM) is a comprehensive, economy-wide database that contains information about the flow of resources that takes place between the different economic agents that exist within an economy (i.e. business enterprises, households, and government) during a given period of time, usually one calendar year.

A SAM is a presentation of the System of National Accounts (SNA) in a matrix format, and incorporates an analysis of the interrelationships that exist between the various economic agents in the economy. These include the distribution of income and expenditure amongst household groups, which provides the national accounts with a social dimension.

By combining these agents into meaningful groups, the SAM makes it possible to clearly distinguish between groups, to research the effects of interaction between groups, and to measure the economic welfare of each group. An advantage of the SAM is that it explicitly breaks down households into relatively homogenous socio-economic categories that are recognisable for policy purposes, and exhibit relatively stable characteristics. This type of disaggregation allows the SAM to be used to analyse the effects of government policies on income distributions.

The National SAM is built using official Supply Use Tables, National Accounts, State Budgets, and Balance of Payments data with the result that it provides a detailed representation of the South African economy in a matrix format that incorporates whatever degree of detail that might be of special interest. There are two key reasons for compiling a SAM:

- Firstly, a SAM provides a framework for organising information about the economic and social structure of a particular geographical entity (i.e. a country, region or province) for a particular time period (usually one calendar year), and
- Secondly, to provide a database that can be used by any one of a number of different macroeconomic modelling tools for evaluating the impact of different economic decisions and/or economic development programmes

The data requirements of all econometric models can always be expressed in the form of a SAM. If it is not possible to express the data in this particular manner, the model will invariably be flawed, making its application in the model-building arena questionable. It is this particular characteristic of the SAM that has made it popular as the database of preference for multi-sector economic models that are used to assess the economic implications of policy changes (or shocks) that will have effects not only on macroeconomic aggregates such as GDP, job opportunities, the balance of payments, etc.; but also upon the structure of the economy. As such, these models must have access to information about production, consumption, labour markets, and the functional distribution of income and the composition of trade.

A defining feature of multi-sector macroeconomic models is their recognition of the extent to which economic systems are characterised by interdependency, in terms of which economic events that impact one sector will have repercussions that are experienced, to a greater or lesser extent, throughout the economy. As such, these models can be used to quantify the magnitude of these repercussions, and to assess the efficacy of alternative economic policies and development initiatives.



A SAM separates activities and commodities; labour is disaggregated by education level; and households by per-capita expenditure deciles. Information on labour is drawn from the Quarterly Labour Force Survey, whilst household information is extracted from the General Household Survey. Finally, the SAM identifies government, investment and foreign accounts. It is therefore an ideal database for conducting economy wide impact assessments, including SAM-based multiplier analysis and computable general equilibrium (CGE) modelling.

3.2 The Distinction between Input-Output Tables and a SAM

An important distinction exists between a conventional Input-Output (I-O) Table and a SAM. The SAM captures the full circular flow whereas an I-O Table only captures part of the circular flow, and does not record details of the interactions in factor markets, i.e. there are no functional links between activities and institutions through factor markets. Furthermore, an I-O Table does not record the transactions between the various institutions in an economic system, or between the various components of an economic system and the rest of the world (RoW), except for commodity transactions.

As such, the data contained within an I-O Table is a subset of the data that is typically included in a SAM, i.e. an I-O Table is in fact a reduced form of a SAM. Hence SAMs and I-O Tables are intimately connected, but it is rarely possible to transform an I-O Table into a SAM whereas, multiple I-O Tables can be created from a SAM.

3.3 Applications of a Social Accounting Matrix

Because the SAM is a comprehensive, disaggregated, consistent, and complete data system of economic entities that captures the interdependence that exists within a socio-economic system, it can be used as a conceptual framework for exploring the impact of exogenous changes in such variables as exports, certain categories of government expenditure, and investment on the entire, interdependent socio-economic system. The SAM's main contribution in the field of economic policy planning and impact analysis is divided in two categories:

- **As a Primary Source of Economic Information**

Being a detailed and integrated national and regional accounting framework consistent with officially published socio-economic data, a SAM instantly projects a picture of the nature of a country's or region's economy. It lends itself to both descriptive and structural analysis

- **As a Planning Tool**

Due to its mathematical/statistical underpinnings it can be transformed into a macro-econometric model that can be used to:

- Conduct economic forecasting exercises/scenario building
- Conduct economic impact analysis, both for policy adjustments at a national and provincial level, and for large project evaluation



- Self-sufficiency analysis, i.e. gap analysis to determine, with the help of the inter-industry and commodity flows contained in the SAM, where possible investment opportunities exist, and
- Calculate the inflationary impacts of price changes instigated at a national level (i.e. administered prices, VAT, etc.).

3.4 Conningarth Economists' Approach to Compiling Social Accounting Matrices

The approach adopted by Conningarth Economists to compiling a SAM tends to be a combination of the top-down and bottom-up approaches advocated by Reinert and Roland-Host (Reinert et al, 1997), who suggested that:

“the construction of a SAM should begin by recasting the macroeconomic accounts for the economy into a simple matrix tableau, a so-called Macro SAM, followed by the construction of a detailed micro SAM” (Reinert et al: pp, 1997).

Conningarth Economists thus starts the process by compiling a highly-aggregated National Macro SAM for the entire country, and then disaggregates this aggregated Macro SAM into a customised National Micro SAM to achieve a more detailed breakdown of the various SAM accounts for the country that corresponds with the requirements of the client for whom the SAM is being built. In this study, Conningarth has compiled a CCIs SAM that corresponds with the requirements specified by the Nelson Mandela Metropolitan University.

3.4.1 Correspondence with National Accounts Data

It is important to recognise that the SAM account totals reflected in the National Macro SAM compiled by Conningarth Economists are derived from National Accounts data published by StatsSA and the South African Reserve Bank (SARB). Furthermore, the SAM account totals reflected in the National Macro and Micro SAMs are exactly the same, i.e. account totals reflected in the National Macro SAM are used as ‘control totals’ for the National Micro SAM.

As such, the figures reflected in all customised SAMs such as the CCIs SAM compiled by Conningarth Economists correspond exactly with National Accounts data published by StatsSA and the SARB for the year for which the SAMs are produced, in this case 2018.

3.4.2 Interface with Macroeconomic Impact Models

The data requirements for all macroeconomic impact models can always be expressed in the form of a SAM, which elaborates on the linkages between S-U-Tables and institutional sector accounts, and incorporates information from I-O tables. It is this particular characteristic of the SAM that has made it popular as the database of preference for multi-sector economic models that are used to assess the economic implications of policy changes (also known as model ‘shocks’). This is especially the case when these changes will have effects not only on macroeconomic aggregates such as GDP, job opportunities, and the balance of payments; but also upon the structure of the economy.



3.5 Structure of the Cultural and Creative Industries SAM for South Africa

A standard SAM incorporates six major accounts, each of which can be sub-divided into numerous sub-accounts. These major accounts are:

1. Activity (Production) Accounts
2. Commodity Accounts
3. Factor Accounts (Labour and Capital (Gross Operating Surplus [GOS]))
4. Institutional Accounts (Enterprises, Households and Government)
5. Capital Accounts
6. Trade Accounts (RoW)

In compiling a CCI SAM, the constituent components have been adjusted so as to conform to the CCI activities in the CSA. The following is an inventory of the number of constituent components that make up the reconfigured CCI SAM:

- | | | |
|----------------------------|---|---------------|
| • Activities | - | 72 components |
| • Commodities | - | 72 components |
| • Factor payments: Labour | - | 12 components |
| • Factor payments: Capital | - | 1 components |
| • Enterprise | - | 1 components |
| • Households | - | 12 components |
| • Government | - | 3 components |
| • Capital account | - | 2 components |
| • Foreign Trade | - | 3 components |

The customised CCI SAM compiled in this study has a total of 185 rows and 182 columns. The figure on the following page presents the structure of the CCI Macro SAM. A later section of this report discusses the various components of the CCI SAM in more detail.



Figure 3.1: Structure of the Cultural and Creative Industries Macro SAM

	Activities		Commodities		Factor Payments - Lab		Factor Payments - Cap		Enterprises	Households	Government				Capital Account		Rest of the World			Capital	Residual	
										1	2	3		1	2	1	2	3				
			SAT Activities	NAT Activities	SAT Commodities	NAT Commodities	Labour	Capital (GOS) - Net Operating Surplus plus Consumption of Fixed Capital	Public and Private Enterprises - Enterprise Income Paid	Households	Central Government	Provincial Government	Local Government	Total Gov	General Government	All Other Sectors (incl. Public Corporations)	Factor Payments	Goods & Services	Transfers	Capital	Discrepancy	Total
Activities		SAT Activities																				
		NAT Activities																				
Commodities		SAT Commodities																				
		NAT Commodities																				
Factor Payments - Labour		Labour																				
Factor Payments - Capital		Capital (GOS) - Net Operating Surplus plus Consumption of Fixed Capital																				
Enterprises		Public and Private Enterprises - Enterprise Income Received																				
Households		Households																				
National Government	1	Property income																				
	2	Transfers																				
	3	Direct tax																				
	4	Indirect tax																				
	5	Subsidies																				
Total Government																						
Capital Account	1	General Government																				
	2	All Other Sectors (incl. Public Corporations)																				
Rest of the World	1	Factor Payments																				
	2	Goods & Services																				
	3	Transfers																				
Balance on Current Account		Balance on Current Account																				
Capital		Capital																				
Discrepancy		Discrepancy																				
		Total																				



4. Results of Updating the Cultural Satellite Account for South Africa to 2018

This section provides information regarding the results of updating the CSA to reflect the latest available 2018 data. In all instances, results are provided for the Cultural Domains. Details regarding the CCI activities within each domain can be found in Annexure A, and a copy of the completed CCI Macro SAM for 2018 can be found in Annexure B.

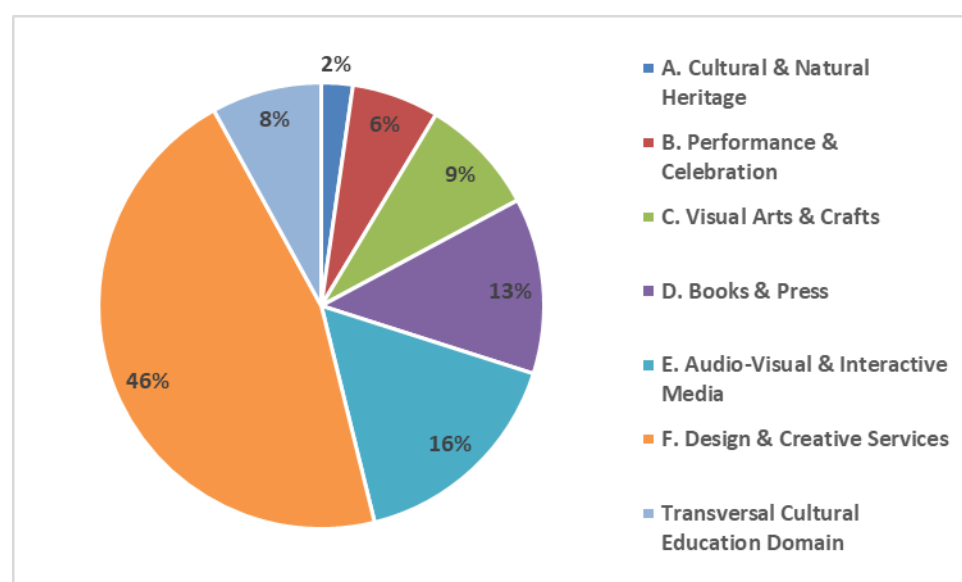
4.1 Cultural Domain Magnitudes

Table 4.1: Cultural and Creative Industry Domains (R million, 2018 prices)

Cultural Domains	Production	GDP/Value Added	Fixed Capital stock	Labour (Numbers)
A. Cultural & Natural Heritage	4,665	1,801	9,834	7,819
B. Performance & Celebration	12,969	4,773	22,144	16,829
C. Visual Arts & Crafts	17,499	2,223	9,203	17,788
D. Books & Press	26,113	9,981	28,535	26,649
E. Audio-Visual & Interactive Media	33,222	8,425	38,313	42,060
F. Design & Creative Services	93,838	37,204	133,659	130,868
Transversal Cultural Education Domain	16,393	8,400	30,263	35,345
Total	204,699	72,807	271,951	277,357

In terms of Production, Value Added, and Labour, Domain F. Design & Creative Services is the most prominent. The aggregate total GDP of the CCI Sector is R72 million. This represents approximately 2% of South Africa's total Gross Value Added in 2018. An estimated 277 357 people were employed directly in the Cultural Domains.

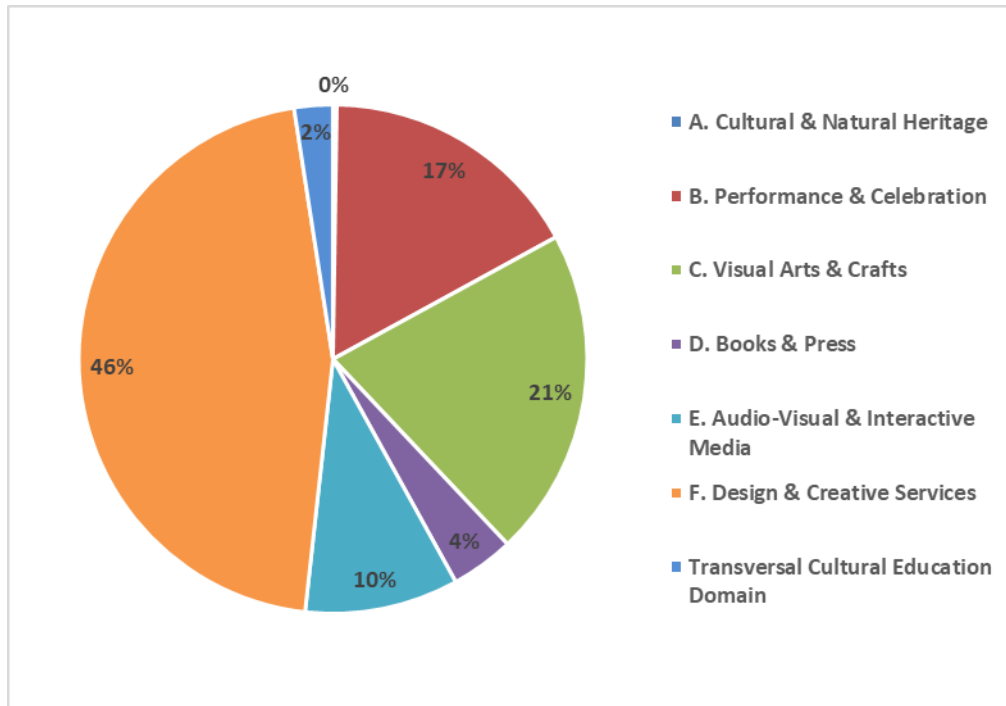
Figure 4.1: Production



It is evident that the largest domain is the Design & Creative Services.

4.2 Cultural Domain International Trade balance

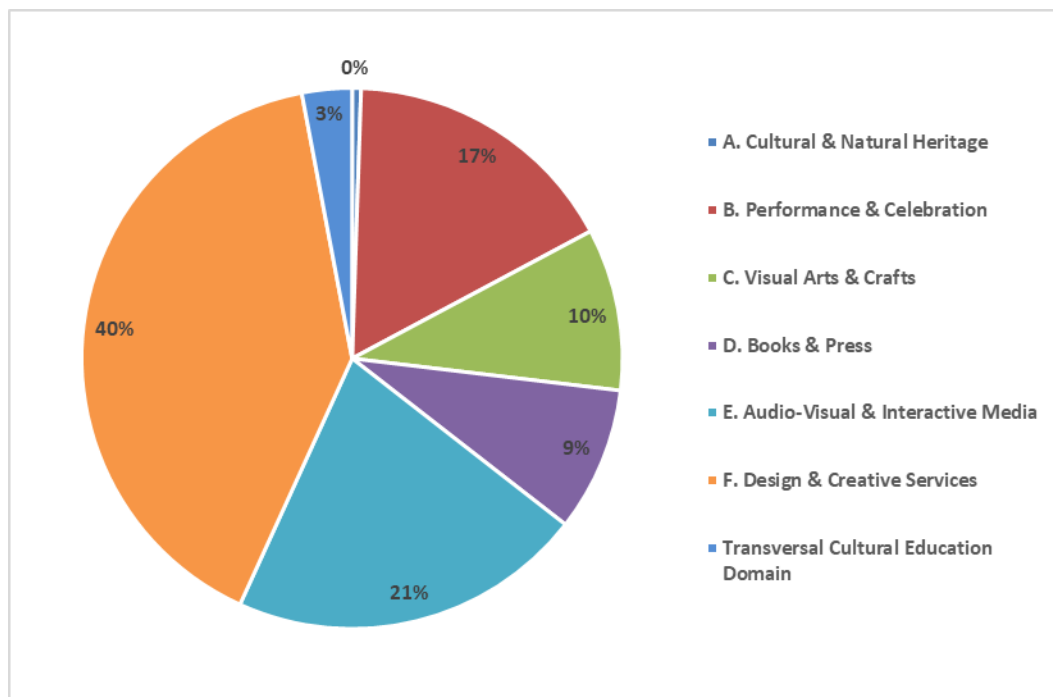
Figure 4.2: Cultural Domain Exports (Percentage)



The Design & Creative Services domain has the highest export intensity. Visual Arts and Crafts, and Performance & Celebration domains also have meaningful exports.



Figure 4.3: Cultural Domain Imports (Percentage)



Design and Creative Services is the largest Importing Domain, and contributes 40% of total CCI imports.



Figure 4.4: Cultural Domain Trade Balance (R Million 2018 prices)

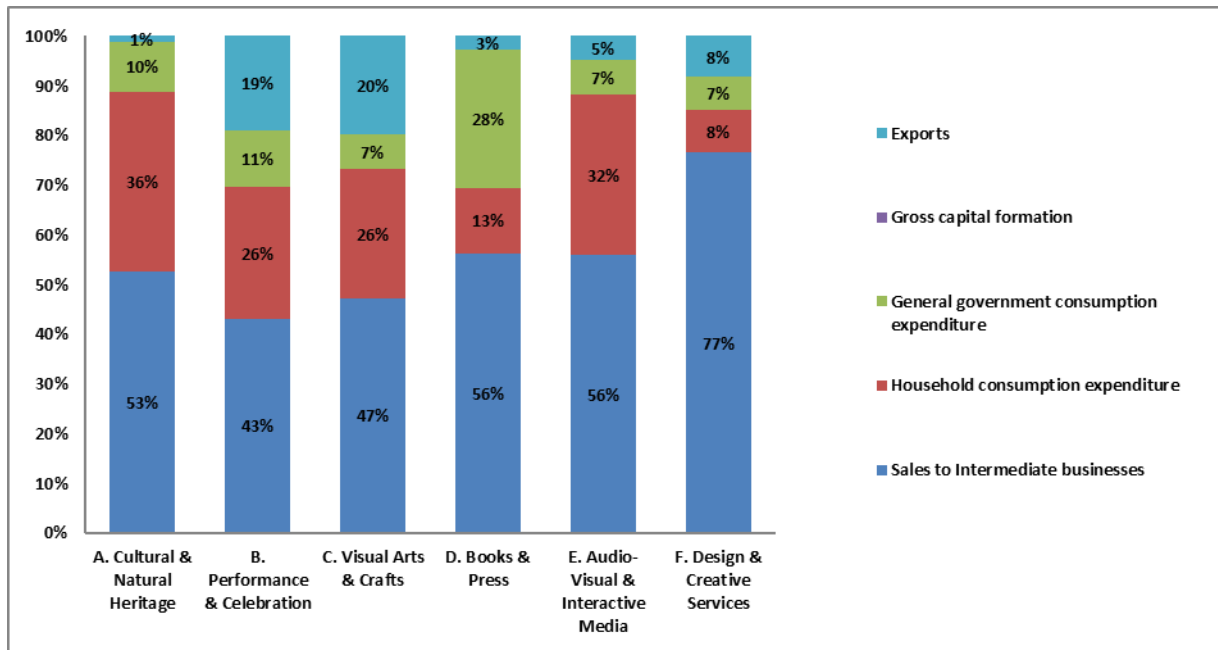


The figure above indicates that two Domains (Visual Arts & Crafts, and Design & Creative Services) have a positive trade balance (i.e. the value of exports exceeds the value of imports); whilst the remaining five domains have negative trade balances (i.e. the value of imports exceeds the value of exports).



4.3 Cultural and Creative Industry Domain Demand

Figure 4.5: Demand (Percentage)



The figure above indicates that Sales to Intermediate businesses is by far the largest Demand factor for all the domains. Sales to Intermediate Businesses ranges between 43% for Performance and Celebration domain, until 77% for Design and Creative Services.



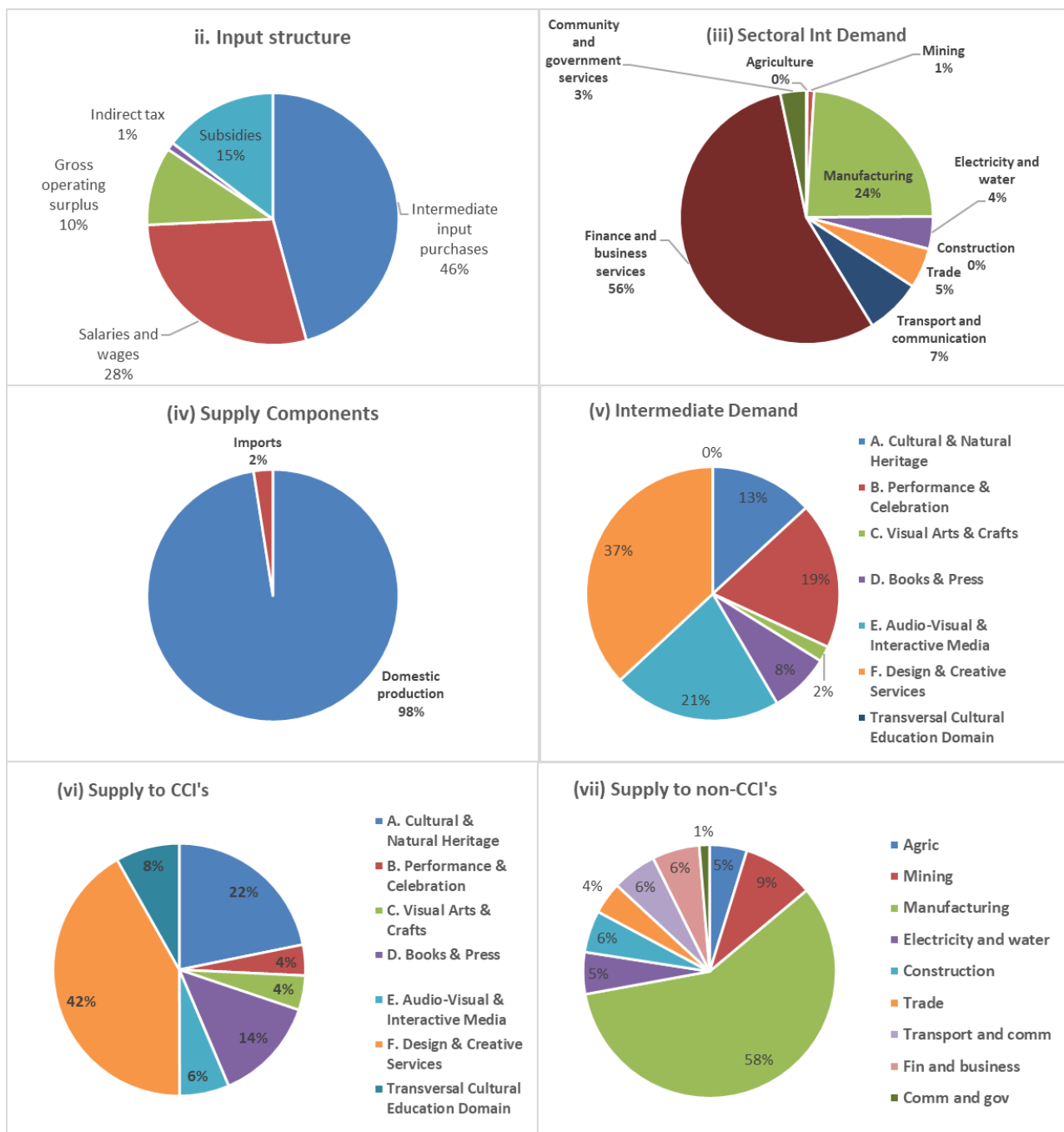
4.4 Results for Cultural and Creative Industry Activities

This section presents results for the various CCI activities associated with each Cultural Domain.

4.4.1 Cultural & Natural Heritage

(i) Magnitude of Different Sub Components	Production%
Creative, Arts & Entertainment Activities	4.0%
Museum Activities & Operation of Historical Sites & Buildings	23.1%
Botanical & Zoological Gardens & Nature Reserves Activities	52.5%
Retail Sale of Second-Hand Goods	20.5%
Total	100%





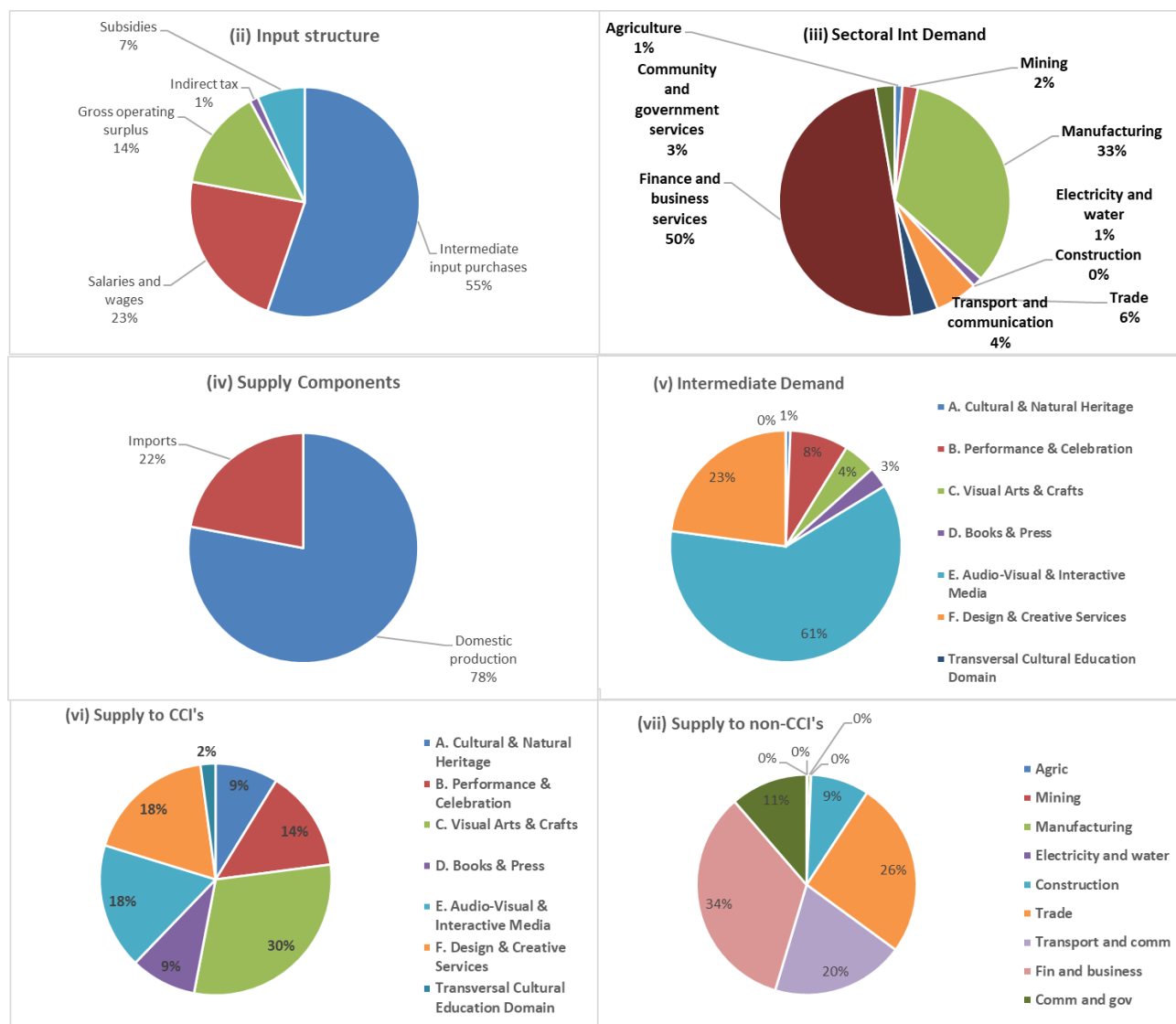
Reference Notes of Cultural & Natural Heritage:

- In Figure (i), Museum Activities & Operation of Historical Sites & Buildings Activities constitutes, just over 23% of total production in this domain.
- In Figure (ii), 46% of the input structure consists of intermediate Input.
- In Figure (iii), Intermediate Input purchases are mainly from Finance and Business service sector.
- In Figure (iv), Domestic Production accounts for 98% of the total supply in this domain.
- In Figure (v), it is shown that the domain primarily buys from the Design & Creative Services in the CCI sector.
- In Figure (vi) the domain sells primarily to the Design & Creative Services domain in the CCI sector.
- In Figure (vii) the domain sells primarily to Manufacturing in the non-CCI sectors.



4.4.2 Performance & Celebration

(i) Magnitude of Different Sub Components	Production%
Creative, Arts & Entertainment Activities	96.4%
Manufacture of Musical Instruments	2.2%
Sound Recording & Music Publishing Activities	1.0%
Retail Sale of Music & Video Recordings in Specialized Stores	0.5%
Total	100%



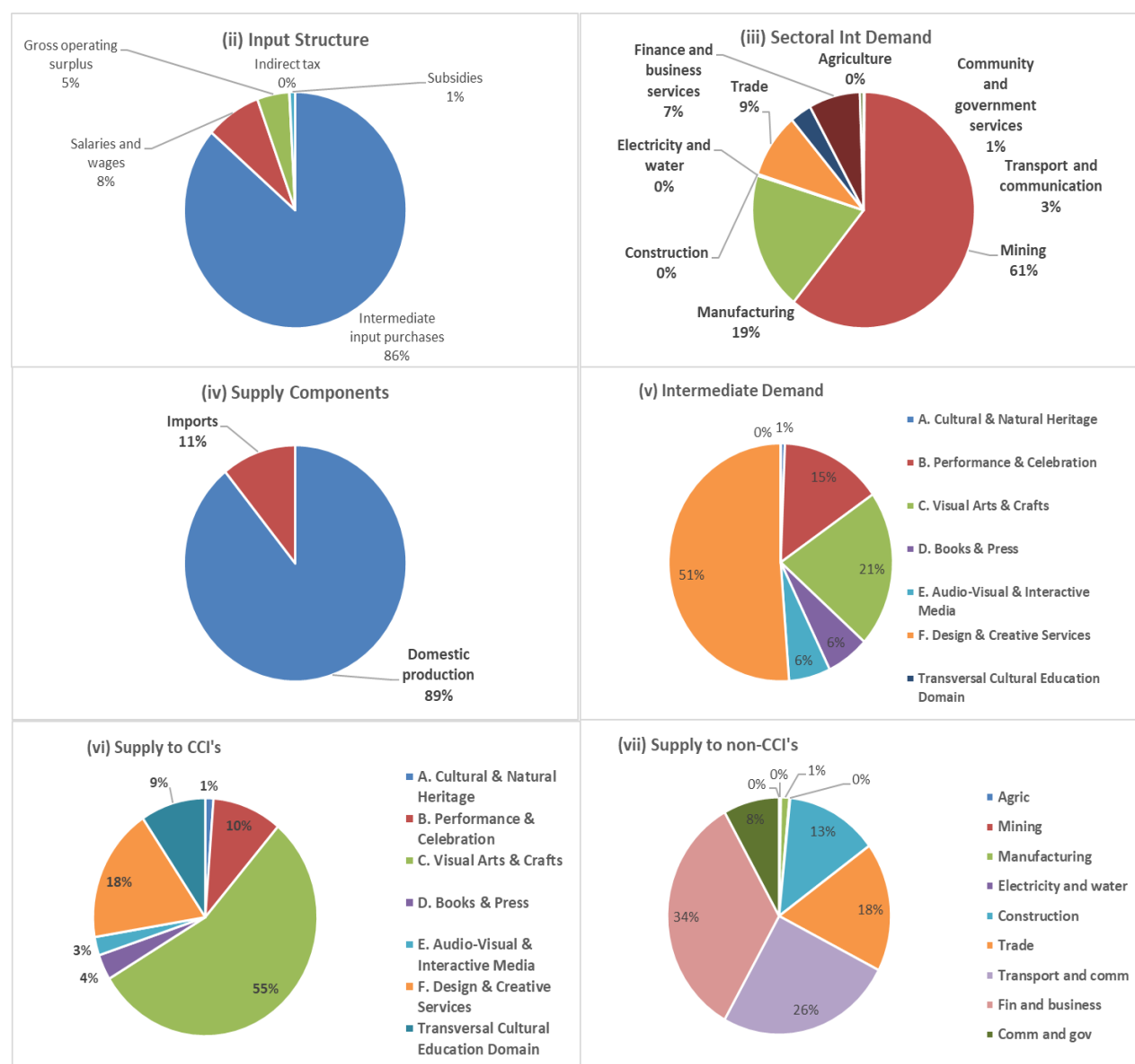
Reference Notes Performance & Celebration:

- In Figure (i), Creative, Arts and Entertainment makes up a 96.4% of the production of the Performance and Celebration domain.
- In Figure (ii), Intermediate Input purchases make up 55% of the total inputs of the domain.
- In Figure (iii), Finance and Business Services represents 50% of the domains intermediate demand.
- Figure (iv) indicates that 22% of the sectors supply is imported.
- In Figure (v) the domain buys primary from the Audio Visual and Interactive Media domain in the CCI sector.
- In Figure (vi) shows that the domain sells mainly to the Visual Arts and Craft domain in the CCI sector.
- In Figure (vii) the domain sells primarily to Finance and Business, but and interlink with the trade and transport and Communication sectors.



4.4.3 Visual Arts & Crafts

(i) Magnitude of Different Sub Components	Production%
Creative, Arts & Entertainment Activities	2.5%
Photographic Activities	6.5%
Other Publishing Activities	5.1%
Manufacture of Jewellery & Related Articles	82.3%
Research & Experimental Development on Social Sciences & Humanities	3.6%
Total	100%



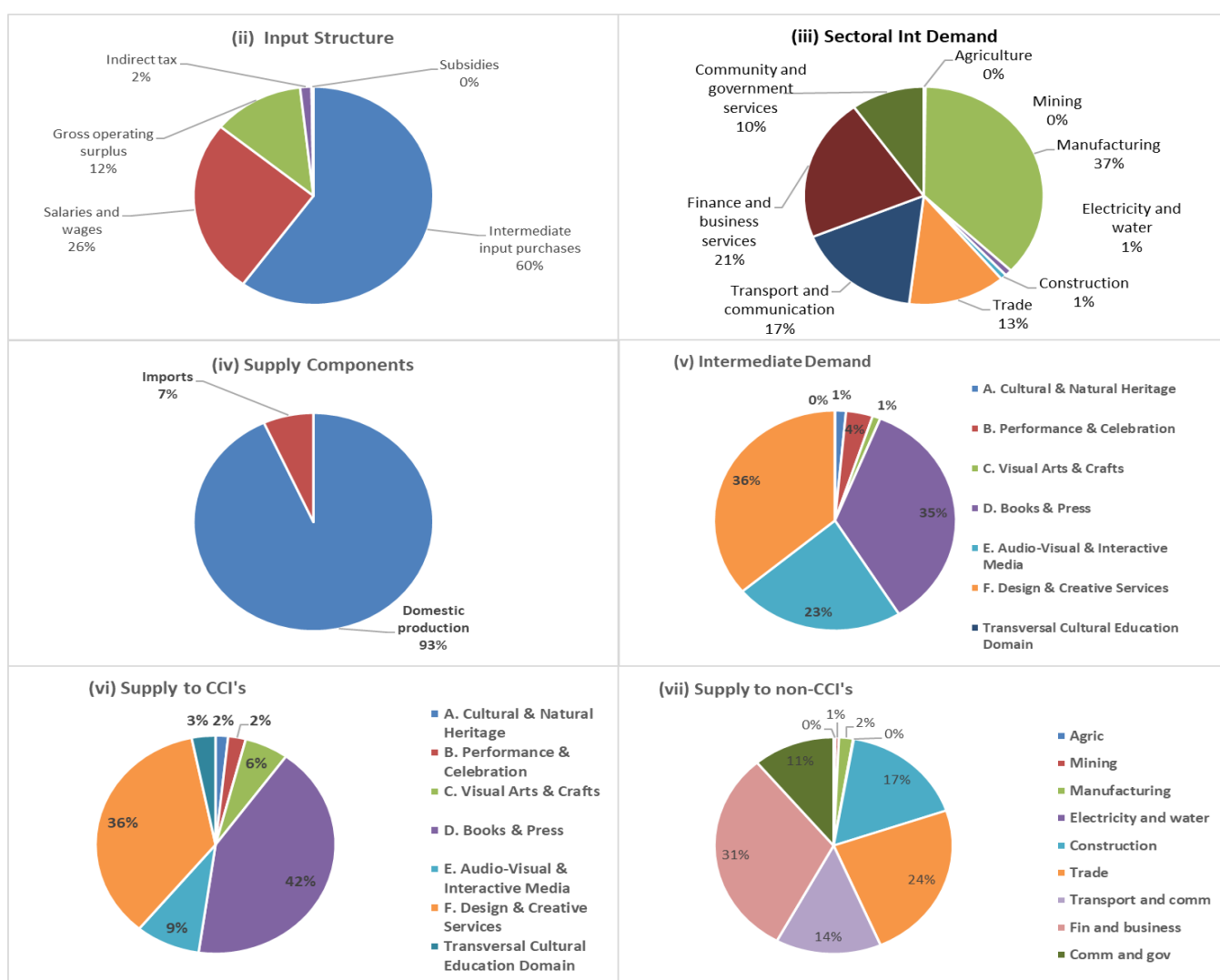
Reference Notes Visual Arts & Crafts:

- In Figure (i), Manufacture of Jewellery and related articles makes up just over 82.3% of the Visual Arts and Crafts domain.
- In Figure (ii), Intermediate Input purchases make up 86% of the input structure.
- In Figure (iii), Mining represents by far the largest Intermediate demand sector. This ties in to the large proportion that Jewellery and related articles makes up of the domain.
- In Figure (iv), Domestic Production makes up 89% of total supply of the domain.
- In Figure (v), the domain buys primarily from the Design and Creative Services domain in the CCI sector.
- In Figure (vi), the Visual Arts and Craft domain sells mostly to itself.
- In Figure (vii) the domain sells primarily to Finance and Business, but and interlink with the trade and transport and Communication sectors as well.



4.4.4 Books & Press

(i) Magnitude of Different Sub Components	Production%
Library & Archives Activities	1.1%
Book Publishing	19.1%
Publishing of Newspapers, Journals & Periodicals	63.0%
Other Publishing Activities	3.4%
Retail Sale of Books, Newspapers & Stationary in Specialized Stores	6.2%
News Agency Activities	2.7%
Other Information Service Activities N.E.C.	1.1%
Wholesale of Other Household Goods	3.1%
Creative Arts & Entertainment Activities	0.4%
Total	100%



Reference Notes Books & Press:

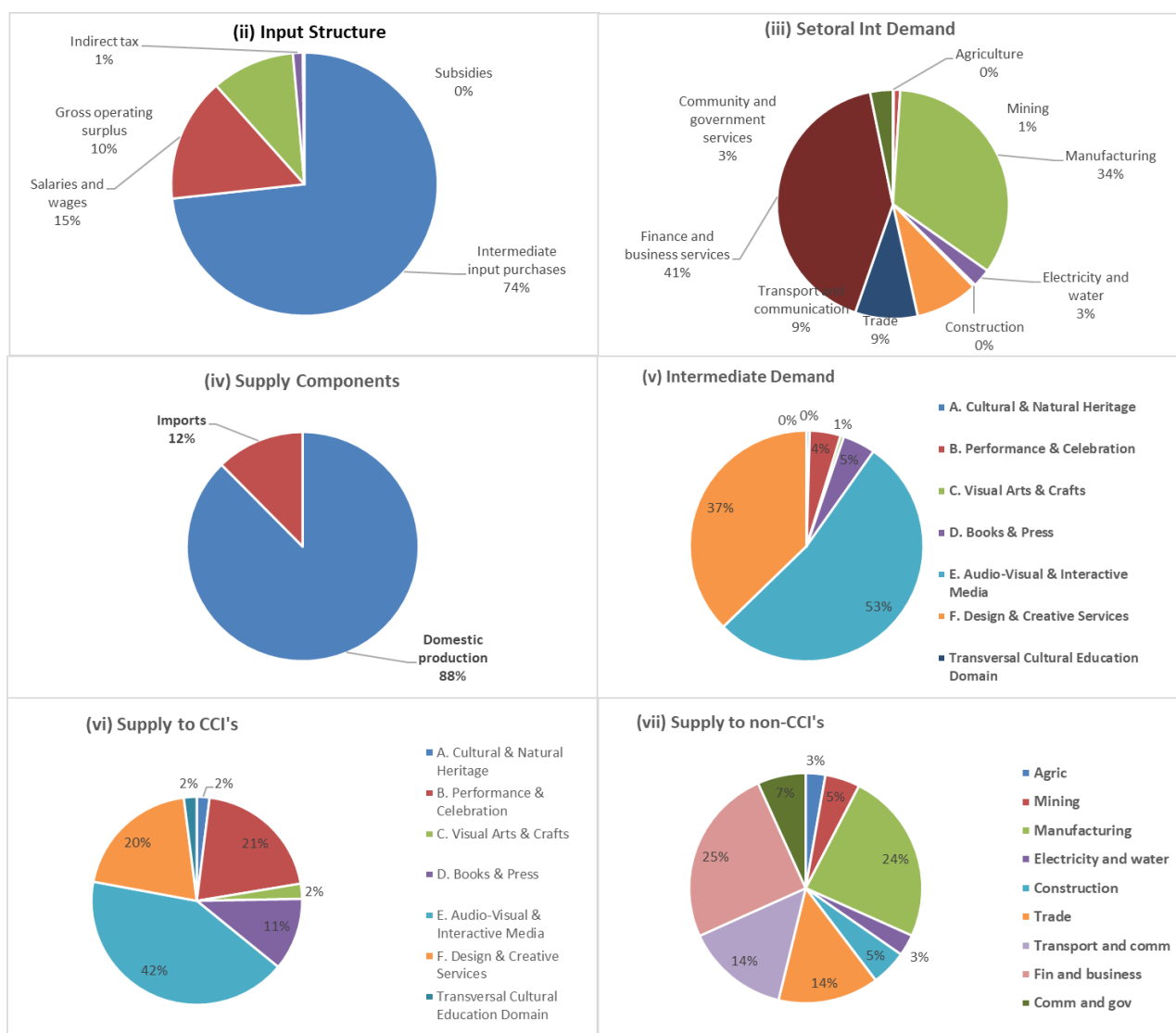
- In Figure (i), Publishing of News Paper Journals & Periodicals represents just over 63.0% of the Books and Press domain.
- In Figure (ii), Intermediate Input purchases represents 60% of total inputs.
- In Figure (iii), Manufacturing is the largest Intermediate Demand Component at 37%.
- In Figure (iv), Imports represent 7% of total supply of the domain
- Figure (v) indicates that the two main buyers are the Design and Creative Services with 36% as well as itself with 35% respectively within the CCI sector.
- In Figure (vi), the domain sells almost half of its sales to itself in the CCI sector.
- In Figure (vii) the domain sells most to Finance and Business, and interlink less with the Trade sector.



4.4.5 Audio-Visual & Interactive Media

(i) Magnitude of Different Sub Components	Production%
Software Publishing	2.1%
Motion Picture, Video & Television Programme Production Activities	24.0%
Motion Picture, Video & Television Programme Post- Production Activities	4.5%
Motion Picture, Video & Television Programme Distribution Activities	4.5%
Sound Recording & Music Publishing Activities	0.9%
Motion Picture Projection Activities	10.7%
Radio Broadcasting	15.3%
Television Programming & Broadcasting Activities	15.9%
Web Portals	18.8%
Renting of Video Tapes & Disks	0.4%
News Agency Activities	1.0%
Retail Sale of Music & Video Recordings in Specialized Stores	1.7%
Retail Sale Via Mail Order Houses or via the Internet	0.3%
Total	100%





Reference Notes Audio-Visual & Interactive Media:

- In Figure (i), Motion Picture, Video & Television Programme Post- Production Activities reflects 24.0% of the production.
- In Figure (ii), intermediate input purchases make up 74% of the input structure.
- In Figure (iii), Finance and Business services followed by Manufacturing are the prominent sectors in the setorial intermediate demand.
- In Figure (iv), Domestic Production accounts for 88% of total supply.
- In Figure (v) this domain buys 53% from itself in the CCI Sector.
- In Figure (vi), it is indicated that the domain sells 42% to itself in the CCI Sector.
- In Figure (vii) the domain sells most to Finance and Business and Manufacturing sectors as the non-CCI sectors.



4.4.6 Design & Creative Services

(i) Magnitude of Different Sub Components	Production%
Specialized Design Activities	20.5%
Architectural & Engineering Activities & Related Technical Consultancy	42.2%
Advertising	37.3%
Total	100%



Reference Notes Design & Creative Services:

- Figure (i) indicates that Architectural & Engineering Activities & Related Technical Consultancy represents 42.2% of the production of the Design and Creative Services Domain.
- In Figure (ii), Intermediate Inputs represent 59% of the input structure of this domain.
- In Figure (iii), Manufacturing and Finance and Business Services represent the largest components of intermediate Demand.
- In Figure (iv), Imports represents 9% of supply of this domain.
- In Figure (v), Design & Creative Services buys mostly from itself in the CCI Sectors.
- In Figure (vi), Design & Creative Services sells mostly to itself in the CCI Sector.
- In Figure (vii) the domain sells primarily to the Manufacturing sector that is part of the non-CCI sectors.

4.4.7 Cultural Education

Cultural Education is a transversal domain which supplies specifically Skilled Employment to all of the other CCI Domains. In this study, Education is not grouped with the rest of the CCI Domains, but rather as part of the Government sector in the SAM. Cultural Education is estimated to be 5% of the total Educational budget, whilst Education makes up 20% of total Government Expenditure.



5. Summary and Conclusion

As indicated above, updating a CSA and embedding it into a CCI SAM has been a desktop exercise.

5.1 Availability and Quality of Input Data

In updating the CCI SAM and its embedded internal CSA, Conningarth Economists has made use of official statistics produced and published by StatsSA and the SARB.

In a number of instances, Conningarth has found that the official statistics provided by StatsSA could not be directly incorporated into the CCI SAM and the CSA. The main reasons for this include:

- The statistics published by StatsSA are not 'disaggregated' to the level specified in the UNESCO FCS. In some instances, StatsSA is using 'older generation' classification systems (i.e. StatsSA uses SIC 7 for classifying activities and commodities, whereas UNESCO is using the ISIC 4.1 classification system), and
- Some of the statistics published by StatsSA are significantly out of date (i.e. the latest Supply and Use Tables published by StatsSA are dated 2010)

Of the 39 CCI activities incorporated into the CSA:

- 7 correspond directly with 2018 Annual Financial Statistics (AFS) report (Statistical Release P0021) published by StatsSA;
- 26 have a less than 100% direct correspondence with AFS 2015 SIC sectors;
- 4 have a less than 100% direct correspondence with the Income and Expenditure 2010/2011 with Households, 2012 (P0100) published by StatsSA and updated to 2018 prices;
- 1 has a less than 100% direct correspondence with the Supply and Use Tables, 2010 (Report 04-04-03) published by StatsSA;
- 1 has a less than 100% direct correspondence with the September 2019 SARB Quarterly Bulletin; and
- Only 1 CCI activity - ISIC 7410 Specialised Design Activities - required an indirect method in order to establish its magnitude.

In addressing this issue, Conningarth Economists has made use of a number of different direct and indirect techniques to produce figures that could be incorporated into the CCI SAM and the CSA - this topic is discussed in detail in Section 2.4.1 above. In cases where there was less than 100% correspondence with a particular data source, Conningarth has made use of a Delphi technique to determine the figures that have been included in the CSA. This approach has enabled Conningarth to populate the CCI SAM and its embedded internal CSA; however, we are of the opinion that the reliability of this input data can be significantly improved.



5.2 Updating a Cultural Satellite Account for South Africa

As indicated above, there is no official cultural satellite account for South Africa that has been compiled by StatsSA, and StatsSA is currently accounting for Cultural Services and Recreation and other Entertainment Services in its Tourism Satellite Accounts (TSA)² where CCIs and Tourism activities overlap.

In the 2017 study, Conningarth Economists has compiled a first-cut CSA for South Africa that is based on the 2009 UNESCO FCS. In this current study (2019), Conningarth has updated the previous CSA. Conningarth is of the opinion that this represents a significant step forward in highlighting the contribution that the CCI sector makes to the overall South African economy; as well as highlighting the backward and forward linkages that exist between the CCI sector activities and the various other upstream and downstream activities that are interconnected to the CCI sector throughout the national economy.

5.3 Recommendations for Further Research

5.3.1 Improving the Quality of Input Data

This research study, as well as a number of the other published research studies of the South African CCI sector, have identified the fact that the data regarding this sector is inadequate, with the result that the CCI SAM and its embedded internal CSA compiled in this study does not provide a 100% accurate reflection of the reality of this sector.

Conningarth Economists has, over the past 28 years, compiled a significant number of customised SAMs, such as the CCI SAM, for the various macroeconomic impact studies that it has undertaken. Our experience in compiling these customised SAMs leads us to the conclusion that it is not possible to build a disaggregated SAM in South Africa that is a 100% reliable reflection of the reality of the disaggregated sectors included in such a customised SAM. Furthermore, our experience shows that the cost of improving the quality of the input data used in compiling a customised SAM frequently exceeds the benefit of improving the reliability of the data included in the SAM.

Notwithstanding this, Conningarth Economists is of the opinion that using a SAM that contains less-than-100% accurate data to evaluate the macroeconomic impact of a development programme/investment project is better than not undertaking macroeconomic impact analysis at all. We believe that it is important to have some perspective on the socio-economic benefits that a proposed development programme/investment project will have on the economy, even if this perspective is not 100% accurate.

It is within this context, that we recommend that careful consideration be given to the cost-effectiveness of improving the quality of data that is incorporated into the CCI SAM and its embedded internal CSA that has been updated as part of this study. Given the fact that StatsSA is unlikely to be in a position to provide more accurate data on the various CCI activities and commodities within the short and medium term, any efforts to improve the quality of data regarding the CCI sector will have to be funded by institutions such as the DSAC, SACO, and the universities associated with SACO.

² Tourism Satellite Accounts for South Africa, Final 2008 - 2011. Report No: 04-05-0 7 March, 2013.



A good deal of this effort will involve attempts to obtain more accurate and reliable input data directly from businesses, and indirectly from other sources involved in the CCI sector. Market research of this nature is complex and expensive, and the time and expense of undertaking such research needs to be carefully weighed against the possibility of obtaining sufficient data from the samples of CCI businesses researched that will enable the reliability of the CCI SAM and its internal CSA to be improved to a statistically valid level.

5.3.2 Enhancing the Cultural Satellite Account

The CSA updated in this study is structured in accordance with the cultural domains and CCI activities and products incorporated into the UNESCO FCS. Haines and Mnguni have developed a roadmap for implementing a CSA for South Africa³. These authors identify StatsSA, the DSAC, and SACO as being the main role players that will be involved in this exercise. They indicate that: *'initial negotiations have already begun and a discussion between StatsSA, DSAC and SACO was held on 22 June, 2016. It was an informal and explorative preliminary meeting to discuss the development of a South African CSA'*. These authors conclude that: *'the process (of implementing a CSA for South Africa), according to StatsSA, would take eight years to be fully operational'*.

Based on our experience of having updated the internal CSA that is embedded in the CCI SAM compiled in this study, we are of the opinion that some progress could be made in enhancing this internal CSA. We recommend that Conningarth be allowed to meet with representatives from the Nelson Mandela University, SACO (and the DSAC) to discuss possible steps that could be taken in the short- to medium-term to enhance this internal CSA, and to improve the quality of information included in this database.

³ Haines, R and Mnguni, M. 2016. A Position Paper on the Nature, Requirements and Operationalisation of a Satellite Cultural Account for South Africa.



6. Annexure A: Detailed Results for the Cultural Satellite Account

Table 6.1: Labour Remuneration, (R million, 2018 prices)

Cultural Domains	Skilled	Semi - skilled	Unskilled	Total
A. Cultural & Natural Heritage	391	652	289	1,332
B. Performance & Celebration	840	1,174	913	2,927
C. Visual Arts & Crafts	603	594	209	1,407
D. Books & Press	2,684	2,673	1,412	6,770
E. Audio-Visual & Interactive Media	3,325	1,514	223	5,063
F. Design & Creative Services	21,989	5,571	1,095	28,655
Transversal Cultural Education Domain	3,528	-	-	3,528
Total	33,360	12,179	4,141	49,681

Table 6.2: Input Structures (R million, 2018 prices)

Cultural Domains	Intermediate input purchases	Salaries and wages	Gross operating surplus	Indirect tax	Subsidies	Total Production
A. Cultural & Natural Heritage	2,132	1,332	469	47	685	4,665
B. Performance & Celebration	7,170	2,927	1,846	155	872	12,969
C. Visual arts & crafts	15,124	1,407	816	10	142	17,499
D. Book & Press	15,667	6,770	3,212	402	63	26,113
E. Audio visual & Interactive Media	24,334	5,063	3,362	400	64	33,222
F. Design & Creative Services	55,861	28,655	8,549	579	193	93,838
Transversal Cultural Education Domain	7,776	3,528	4,872	217	0	16,393
Total	128,063	49,681	23,126	1,810	2,019	204,699



Table 6.3: Intermediate Input Purchases (R million, 2018 prices)

Cultural Domains	Agriculture	Mining	Manufacturing	Electricity and water	Construction	Trade	Transport and communication	Finance and business services	Community and government services	Total
A. Cultural & Natural Heritage	2	14	378	65	0	81	113	877	52	1,583
B. Performance & Celebration	55	111	1,701	68	3	302	184	2,534	136	5,094
C. Visual Arts & Crafts	22	8,254	2,576	29	3	1,208	427	1,016	72	13,608
D. Books & Press	9	17	4,157	108	92	1,485	1,908	2,402	1,116	11,294
E. Audio-Visual & Interactive Media	16	120	4,587	353	43	1,191	1,181	5,630	430	13,552
F. Design & Creative Services	46	124	13,733	363	220	3,929	4,333	11,385	3,012	37,144
Transversal Cultural Education Domain	11	74	1,564	171	4	276	460	492	633	3,685
Total	161	8,714	28,697	1,157	365	8,472	8,606	24,337	5,450	85,959

Table 6.4: Exports and Imports (R million, 2018 prices)

Cultural Domains	Exports	Imports	Trade balance
A. Cultural & Natural Heritage	49	118	-69
B. Performance & Celebration	3,358	3,658	-300
C. Visual Arts & Crafts	4,183	2,128	2,056
D. Books & Press	804	1,895	-1,092
E. Audio-Visual & Interactive Media	1,956	4,673	-2,717
F. Design & Creative Services	9,157	8,825	331
Transversal Cultural Education Domain	492	656	-164
Total	19,999	21,953	-1,955



Table 6.5: Demand (R million, 2018 prices)

Cultural Domains	Sales to Intermediate businesses	Household consumption expenditure	General government consumption expenditure	Gross capital formation	Exports	Total
A. Cultural & Natural Heritage	2,242	1,535	423	0	49	4,249
B. Performance & Celebration	7,644	4,663	2,017	8	3,358	17,690
C. Visual Arts & Crafts	10,061	5,499	1,506	4	4,183	21,254
D. Books & Press	17,120	3,977	8,470	1	804	30,372
E. Audio-Visual & Interactive Media	22,906	13,266	2,858	0	1,956	40,986
F. Design & Creative Services	85,460	9,321	7,451	0	9,157	111,390
Transversal Cultural Education Domain	0	0	0	0	0	0
Total	145,434	38,261	22,725	13	19,507	225,940

Table 6.6: Supply Components (R million, 2018 prices)

Cultural Domains	Domestic Production	Imports	Total Supply
A. Cultural & Natural Heritage	4665	118	4782
B. Performance & Celebration	12969	3,658	16628
C. Visual Arts & Crafts	17499	2,128	19627
D. Books & Press	26113	1,895	28009
E. Audio-Visual & Interactive Media	33222	4,673	37895
F. Design & Creative Services	93838	8,825	102663
Transversal Cultural Education Domain	16393	656	17048
Total	204,699	21,953	226,652



Table 6.7: Intra-CCI Linkages (R million, 2018 prices)

Cultural Domains	A. Cultural & Natural Heritage	B. Perform ance & Celebrat ion	C. Visual Arts & Crafts	D. Books & Press	E. Audio- Visual & Interacti ve Media	F. Design & Creative Services	Total
A. Cultural & Natural Heritage	130	186	20	76	214	366	992
B. Performance & Celebration	24	301	168	107	2,244	843	3,687
C. Visual Arts & Crafts	26	637	922	268	259	2,217	4,331
D. Books & Press	80	195	58	1,910	1,238	1,970	5,451
E. Audio-Visual & Interactive Media	38	372	42	394	4,619	3,259	8,725
F. Design & Creative Services	250	385	306	1,617	2,208	10,061	14,827
Transversal Cultural Education Domain	49	45	157	145	218	79	692
Total	598	2,120	1,673	4,518	11,000	18,795	38,706



7. Annexure B: Cultural and Creative Industries Macro SAM, Rand Millions, 2018 Current Prices

	Activities		Commodities		Factor Payments - Lab		Factor Payments - Cap	Enterprises	Households	Government				Capital Account		Rest of the World			Capital	Residual		
										1	2	3		1	2	1	2	3				
		SAT Activities	NAT Activities	SAT Commodities	NAT Commodities	Labour	Capital (GOS) - Net Operating Surplus plus Consumption of Fixed Capital	Public and Private Enterprises - Enterprise Income Paid	Households	Central Government	Provincial Government	Local Government	Total Gov	General Government	All Other Sectors (incl. Public Corporations)	Factor Payments	Goods & Services	Transfers	Capital	Discrepancy	Total	
Activities	SAT Activities	-	-	168,800	-	-	-	-	-	-	-	-	-	-	-	-	19,507	-	-	-	188,306	
Commodities	NAT Activities	-	-	-	7,683,486	-	-	-	-	-	-	-	-	-	-	-	1,454,632	-	-	1,956	9,140,074	
	SAT Commodities	38,013	107,421	-	-	-	-	-	38,261	11,191	7,879	3,655	22,725	9	5	-	-	-	-	-	206,434	
Factor Payments - Labour	NAT Commodities	82,274	5,596,128	-	-	-	-	-	2,919,009	122,492	59,583	111,091	293,166	145,758	728,624	-	-	-	-	8,400	9,773,360	
	Labour	46,153	1,555,019	-	-	-	-	-	-	247,895	363,199	107,913	719,007	-	-	12,240	-	-	-	-	2,332,419	
Factor Payments - Capital	Capital (GOS) - Net Operating Surplus plus Consumption of Fixed Capital	18,254	1,798,861	-	-	-	-	-	-	69,554	24,501	14,498	108,553	-	-	84,268	-	-	-	1	2,009,937	
Enterprises	Public and Private Enterprises - Enterprise Income Received	-	-	-	-	-	1,034,853	-	-	139,148	49,017	29,004	217,169	-	-	-	-	-	-	-	1,252,022	
Households	Households	-	-	-	-	2,317,919	-	877,661	15,392	259,242	1,614	-	260,856	-	-	-	-	-	23,346	-	3,495,174	
National Government	1 Property income	-	-	-	-	-	38,068	-	-	-	-	-	-	-	-	-	-	-	-	-	38,068	
	2 Transfers	-	-	-	-	-	-	23,538	12,584	767	413	55	1,234	-	-	-	-	-	1,234	-	38,590	
	3 Direct tax	-	-	-	-	-	-	227,953	502,916	-	-	-	-	-	-	-	-	-	-	-	730,869	
	4 Indirect tax	1,593	90,720	18,227	553,233	-	-	-	-	47,208	22,782	41,569	111,559	-	-	-	-	-	-	-	775,332	
	5 Subsidies	2,019	(8,075)	(1,891)	(11,060)	-	-	-	-	8,043	3,882	7,082	19,007	-	-	-	-	-	-	-	-	
Total Government		3,612	82,645	16,336	542,173	-	38,068	251,491	515,500	56,018	27,076	48,706	131,800	-	-	-	-	-	1,234	-	(2,576)	1,580,283
Capital Account	1 General Government	-	-	-	-	-	93,761	-	-	(94,884)	-	-	(94,884)	-	-	-	-	-	-	-	(1,123)	
	2 All Other Sectors (incl. Public Corporations)	-	-	-	-	-	582,726	122,870	(3,038)	-	-	-	-	-	-	-	-	-	-	-	702,558	
Rest of the World	1 Factor Payments	-	-	-	-	14,500	236,052	-	-	(128,114)	-	-	(128,114)	-	-	-	-	-	-	16,482	138,920	
	2 Goods & Services	-	-	21,297	1,547,702	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,568,999	
	3 Transfers	-	-	-	-	-	-	-	10,050	4,351	39,674	6,179	50,204	-	-	-	-	-	-	-	60,254	
Balance on Current Account	Balance on Current Account	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(172,962)	-	(172,962)	
Capital	Capital	-	-	-	-	-	-	-	-	-	-	-	-	(146,890)	(26,071)	-	-	-	-	-	(172,961)	
Discrepancy	Discrepancy	-	-	-	-	-	24,477	-	-	-	-	-	-	-	-	-	-	-	-	-	24,477	
	Total	188,306	9,140,074	206,434	9,773,360	2,332,419	2,009,937	1,252,022	3,495,174	686,893	572,543	321,047	1,580,482	(1,123)	702,558	96,508	1,474,139	24,580	(172,962)	24,263	-	



8. Annexure C: ISIC Codes Description

8.1 Inclusions

This class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers. This includes the production and promotion of, and participation in, live performances, events or exhibits intended for public viewing; the provision of artistic, creative or technical skills for the production of artistic products and live performances.

This class includes:

- Production of live theatrical presentations, concerts and opera or dance productions and other stage productions:
 - Activities of groups, circuses or companies, orchestras or bands
 - Activities of individual artists such as authors, actors, directors, musicians, lecturers or speakers, stage-set designers and builders etc.
- Operation of concert and theatre halls and other arts facilities
- Activities of sculptors, painters, cartoonists, engravers, etchers etc.
- Activities of individual writers, for all subjects including fictional writing, technical writing etc.
- Activities of independent journalists
- Restoring of works of art such as paintings etc.
- Activities of producers or entrepreneurs of arts live events, with or without facilities

8.2 Exclusions

This class excludes:

- Restoring of stained glass windows, see ISIC Code - 2310
- Manufacture of statues, other than artistic originals, see ISIC Code - 2396
- Restoring of organs and other historical musical instruments, see ISIC Code - 3319
- Restoring of historical sites and buildings, see ISIC Code - 4100
- Motion picture and video production, see ISIC Code - 5911, ISIC Code - 5912
- Operation of cinemas, see ISIC Code - 5914
- Activities of personal theatrical or artistic agents or agencies, see ISIC Code - 7490
- Casting activities, see ISIC Code - 7810
- Activities of ticket agencies, see ISIC Code - 7990
- Operation of museums of all kinds, see ISIC Code - 9102
- Sports and amusement and recreation activities, see ISIC Code - 93
- Restoring of furniture (except museum type restoration), see ISIC Code - 9524
- Looking for SIC or NAICS Codes?



9. ISIC Code 9102 - Museums Activities and Operation Of Historical Sites And Buildings

9.1 Inclusions

This class includes:

- Operation of museums of all kinds:
 - Art museums, museums of jewellery, furniture, costumes, ceramics, silverware
 - Natural history, science and technological museums, historical museums, including military museums
 - Other specialized museums
 - Open-air museums
- Operation of historical sites and buildings

9.2 Exclusions

This class excludes:

- Renovation and restoration of historical sites and buildings, see ISIC Code - F
- Restoration of works of art and museum collection objects, see ISIC Code - 9000
- Activities of libraries and archives, see ISIC Code - 9101

10. ISIC Code 9103 - Botanical And Zoological Gardens And Nature Reserves Activities

10.1 Inclusions

This class includes:

- Operation of botanical and zoological gardens, including children's zoos
- Operation of nature reserves, including wildlife preservation, etc.

10.2 Exclusions

This class excludes:

- Landscape and gardening services, see ISIC Code - 8130
- Operation of sport fishing and hunting preserves, see ISIC Code – 9319



11. ISIC Code 4774 - Retail Sale of Second-Hand Goods

11.1 Inclusions

This class includes:

- Retail sale of second-hand books
- Retail sale of other second-hand goods
- Retail sale of antiques
- Activities of auctioning houses (retail)

11.2 Exclusions

This class excludes:

- Retail sale of second-hand motor vehicles, see ISIC Code - 4510
- Activities of Internet auctions and other non-store auctions (retail), see ISIC Code - 4791, ISIC Code - 4799
- Activities of pawn shops, see ISIC Code - 6492

12. ISIC Code 3220 - Manufacture Of Musical Instruments

12.1 Inclusions

This class includes:

- Manufacture of stringed instruments
- Manufacture of keyboard stringed instruments, including automatic pianos
- Manufacture of keyboard pipe organs, including harmoniums and similar keyboard instruments with free metal reeds
- Manufacture of accordions and similar instruments, including mouth organs
- Manufacture of wind instruments
- Manufacture of percussion musical instruments
- Manufacture of musical instruments, the sound of which is produced electronically
- Manufacture of musical boxes, fairground organs, calliopes etc.
- Manufacture of instrument parts and accessories:
 - Metronomes, tuning forks, pitch pipes, cards, discs and rolls for automatic mechanical instruments etc.
- Manufacture of whistles, call horns and other mouth-blown sound signalling instruments

12.2 Exclusions

This class excludes:

- Reproduction of pre-recorded sound and video tapes and discs, see ISIC Code - 1820



- Manufacture of microphones, amplifiers, loudspeakers, headphones and similar components, see ISIC Code - 2640
- Manufacture of record players, tape recorders and the like, see ISIC Code - 2640
- Manufacture of toy musical instruments, see ISIC Code - 3240
- Restoring of organs and other historic musical instruments, see ISIC Code - 3319
- Publishing of pre-recorded sound and video tapes and discs, see ISIC Code - 5920
- Piano tuning, see ISIC Code - 9529

13. ISIC Code 5920 - Sound Recording and Music Publishing Activities

13.1 Inclusions

This class includes:

- Production of original (sound) master recordings, such as tapes, CDs
- Sound recording service activities in a studio or elsewhere, including the production of taped (i.e. non-live) radio programming, audio for film, television etc.
- Music publishing, i.e. activities of:
 - Acquiring and registering copyrights for musical compositions
 - Promoting, authorizing and using these compositions in recordings, radio, television, motion pictures, live performances, print and other media
 - Distributing sound recordings to wholesalers, retailers or directly to the public

Units engaged in these activities may own the copyright or act as administrator of the music copyrights on behalf of the copyright owners.

- Publishing of music and sheet books

13.2 Exclusions

This class excludes:

- Reproduction from master copies of music or other sound recordings, see ISIC Code - 1820
- Wholesale of recorded audio tapes and disks, see ISIC Code - 4649

14. ISIC Code 4762 - Retail Sale of Music and Video Recordings In Specialized Stores

14.1 Inclusions

This class includes:

- Retail sale of musical records, audio tapes, compact discs and cassettes
- Retail sale of video tapes and DVDs

- Retail sale of blank tapes and discs

15. ISIC Code 7420 - Photographic Activities

15.1 Inclusions

This class includes:

- Commercial and consumer photograph production:
 - Portrait photography for passports, schools, weddings etc.
 - Photography for commercials, publishers, fashion, real estate or tourism purposes
 - Aerial photography
 - Videotaping of events: weddings, meetings etc.
- Film processing:
 - Developing, printing and enlarging from client-taken negatives or cine-films
 - Film developing and photo printing laboratories
 - One hour photo shops (not part of camera stores)
 - Mounting of slides
 - Copying and restoring or transparency retouching in connection with photographs
- Activities of photojournalists
- Microfilming of documents

15.2 Exclusions

This class excludes:

- Processing motion picture film related to the motion picture and television industries, see ISIC Code - 5912
- Cartographic and spatial information activities, see ISIC Code - 7110



16. ISIC Code 5819 - Other Publishing Activities

16.1 Inclusions

This class includes:

- Publishing (including on-line) of:
 - Catalogues
 - Photos, engravings and postcards
 - Greeting cards
 - Forms
 - Posters, reproduction of works of art
 - Advertising material
 - Other printed matter
- On-line publishing of statistics or other information

16.2 Exclusions

This class excludes:

- Retail sale of software, see ISIC Code - 4741
- Publishing of advertising newspapers, see ISIC Code - 5813
- On-line provision of software (application hosting and application service provisioning), see ISIC Code - 6311

17. ISIC Code 3211 - Manufacture Of Jewellery and Related Articles

17.1 Inclusions

This class includes:

- Production of worked pearls
- Production of precious and semi-precious stones in the worked state, including the working of industrial quality stones and synthetic or reconstructed precious or semi-precious stones
- Working of diamonds
- Manufacture of jewellery of precious metal or of base metals clad with precious metals, or precious or semi-precious stones, or of combinations of precious metal and precious or semi-precious stones or of other materials
- Manufacture of goldsmiths' articles of precious metals or of base metals clad with precious metals:
 - Dinnerware, flatware, hollowware, toilet articles, office or desk articles, articles for religious use etc.
- Manufacture of technical or laboratory articles of precious metal (except instruments and parts thereof): crucibles, spatulas, electroplating anodes etc.
- Manufacture of precious metal watch bands, wristbands, watch straps and cigarette cases

- Manufacture of coins, including coins for use as legal tender, whether or not of precious metal
- Engraving of personal precious and non-precious metal products

17.2 Exclusions

This class excludes:

- Manufacture of non-metal watch bands (fabric, leather, plastic etc.), see ISIC Code - 1512
- Manufacture of articles of base metal plated with precious metal (except imitation jewellery), see ISIC Code - 25
- Manufacture of watchcases, see ISIC Code - 2652
- Manufacture of (non-precious) metal watch bands, see ISIC Code - 3212

18. ISIC Code 7220 - Research and Experimental Development on Social Sciences and Humanities

18.1 Inclusions

This class includes:

- Research and development on social sciences
- Research and development on humanities
- Interdisciplinary research and development, predominantly on social sciences and humanities

18.2 Exclusions

This class excludes:

- Market research, see ISIC Code - 7320
- manufacture of imitation jewellery, see ISIC Code - 3212

19. ISIC Code 9101 - Library and Archives Activities

19.1 Inclusions

This class includes:

- Documentation and information activities of libraries of all kinds, reading, listening and viewing rooms, public archives providing service to the general public or to a special clientele, such as students, scientists, staff, members as well as operation of government archives:
 - Organization of a collection, whether specialized or not
 - Cataloguing collections



- Lending and storage of books, maps, periodicals, films, records, tapes, works of art etc.
- Retrieval activities in order to comply with information requests etc.
- Stock photo libraries and services

20. ISIC Code 5811 - Book Publishing

20.1 Inclusions

This class includes the activities of publishing books in print, electronic (CD, electronic displays etc.) or audio form or on the Internet.

This class includes:

- Publishing of books, brochures, leaflets and similar publications, including publishing of dictionaries and encyclopedias
- Publishing of atlases, maps and charts
- Publishing of audio books
- Publishing of encyclopedias etc. on CD-ROM

20.2 Exclusions

This class excludes:

- Production of globes, see ISIC Code - 3290
- Publishing of advertising material, see ISIC Code - 5819
- Publishing of music and sheet books, see ISIC Code - 5920
- Activities of independent authors, see ISIC Code - 9000

21. ISIC Code 5813 - Publishing Of Newspapers, Journals and Periodicals

21.1 Inclusions

This class includes:

- Publishing of newspapers, including advertising newspapers
- Publishing of periodicals and other journals, including publishing of radio and television schedules

Publishing can be done in print or electronic form, including on the Internet.



22. ISIC Code 5819 - Other Publishing Activities

22.1 Inclusions

This class includes:

- Publishing (including on-line) of:
 - Catalogues
 - Photos, engravings and postcards
 - Greeting cards
 - Forms
 - Posters, reproduction of works of art
 - Advertising material
 - Other printed matter
- On-line publishing of statistics or other information

22.2 Exclusions

This class excludes:

- Retail sale of software, see ISIC Code - 4741
- Publishing of advertising newspapers, see ISIC Code - 5813
- On-line provision of software (application hosting and application service provisioning), see ISIC Code - 6311

23. ISIC Code 4761 - Retail Sale of Books, Newspapers and Stationery in Specialized Stores

23.1 Inclusions

This class includes:

- Retail sale of books of all kinds
- Retail sale of newspapers and stationery
- Retail sale of office supplies such as pens, pencils, paper etc.

23.2 Exclusions

This class excludes:

- Retail sale of second-hand or antique books, see ISIC Code - 4774



24. ISIC Code 6391 - News Agency Activities

24.1 Inclusions

This class includes:

- News syndicate and news agency activities furnishing news, pictures and features to the media

24.2 Exclusions

This class excludes:

- Activities of independent photojournalists, see ISIC Code - 7420
- Activities of independent journalists, see ISIC Code - 9000

25. ISIC Code 6399 - Other Information Service Activities Not Elsewhere Classified

25.1 Inclusions

This class includes other information service activities not elsewhere classified, such as:

- Telephone based information services
- Information search services on a contract or fee basis
- News clipping services, press clipping services, etc.

25.2 Exclusions

This class excludes:

- Activities of call centres, see ISIC Code - 8220



26. ISIC Code 4649 - Wholesale Of Other Household Goods

26.1 Inclusions

This class includes:

- Wholesale of household furniture
- Wholesale of household appliances
- Wholesale of consumer electronics:
 - Radio and TV equipment
 - CD and DVD players and recorders
 - Stereo equipment
 - Video game consoles
- Wholesale of lighting equipment
- Wholesale of cutlery
- Wholesale of china and glassware
- Wholesale of woodenware, wickerwork and corkware etc.
- Wholesale of pharmaceutical and medical goods
- Wholesale of perfumeries, cosmetics and soaps
- Wholesale of bicycles and their parts and accessories
- Wholesale of stationery, books, magazines and newspapers
- Wholesale of photographic and optical goods (e.g. sunglasses, binoculars, magnifying glasses)
- Wholesale of recorded audio and video tapes, CDs, DVDs
- Wholesale of leather goods and travel accessories
- Wholesale of watches, clocks and jewellery
- Wholesale of musical instruments, games and toys, sports goods

26.2 Exclusions

This class excludes:

- Wholesale of blank audio and video tapes, CDs, DVDs, see ISIC Code - 4652
- Wholesale of radio and TV broadcasting equipment, see ISIC Code - 4652
- Wholesale of office furniture, see ISIC Code - 4659



27. ISIC Code 5911 - Motion Picture, Video and Television Programme Production Activities

27.1 Inclusions

This class includes:

- Production of motion pictures, videos, television programmes or television commercials

27.2 Exclusions

This class excludes:

- Film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, see ISIC Code - 1820
- Wholesale of recorded video tapes, CDs, DVDs, see ISIC Code - 4649
- Retail trade of video tapes, CDs, DVDs, see ISIC Code - 4762
- Post-production activities, see ISIC Code - 5912
- Reproduction of motion picture film for theatrical distribution, see ISIC Code - 5912
- Sound recording and recording of books on tape, see ISIC Code - 5920
- Creating a complete television channel programme, see ISIC Code - 6020
- Television broadcasting, see ISIC Code - 6020
- Film processing other than for the motion picture industry, see ISIC Code - 7420
- Activities of personal theatrical or artistic agents or agencies, see ISIC Code - 7490
- Renting of video tapes, DVDs to the general public, see ISIC Code - 7722
- Real-time (i.e. simultaneous) closed captioning of live television performances, meetings, conferences, etc., see ISIC Code - 8299
- Activities of own account actors, cartoonists, directors, stage designers and technical specialists, see ISIC Code - 9000

28. ISIC Code 5912 - Motion Picture, Video and Television Programme Post-Production Activities

28.1 Inclusions

This class includes:

- Post-production activities such as:
 - Editing, titling, subtitling, credits
 - Closed captioning
 - Computer-produced graphics, animation and special effects
 - Film/tape transfers
- Activities of motion picture film laboratories and activities of special laboratories for animated films:
 - Developing and processing motion picture film

- Reproduction of motion picture film for theatrical distribution
- Activities of stock footage film libraries etc.

28.2 Exclusions

This class excludes:

- Film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, see ISIC Code - 1820
- Wholesale of recorded video tapes, CDs, DVDs, see ISIC Code - 4649
- Retail trade of video tapes, CDs, DVDs, see ISIC Code - 4762
- Film processing other than for the motion picture industry, see ISIC Code - 7420
- Renting of video tapes, DVDs to the general public, see ISIC Code - 7722
- Activities of own account actors, cartoonists, directors, stage designers and technical specialists, see ISIC Code - 9000

29. ISIC Code 5913 - Motion Picture, Video and Television Programme Distribution Activities

29.1 Inclusions

This class includes:

- Distributing film, video tapes, DVDs and similar productions to motion picture theatres, television networks and stations and exhibitors
- Acquiring film, video tape and DVD distribution rights

29.2 Exclusions

This class excludes:

- Film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, see ISIC Code - 1820
- Reproduction of motion picture film for theatrical distribution, see ISIC Code - 5912

30. ISIC Code 5920 - Sound Recording and Music Publishing Activities

30.1 Inclusions

This class includes:

- Production of original (sound) master recordings, such as tapes, CDs
- Sound recording service activities in a studio or elsewhere, including the production of taped (i.e. non-live) radio programming, audio for film, television etc.

- Music publishing, i.e. activities of:
 - Acquiring and registering copyrights for musical compositions
 - Promoting, authorizing and using these compositions in recordings, radio, television, motion pictures, live performances, print and other media
 - Distributing sound recordings to wholesalers, retailers or directly to the public

Units engaged in these activities may own the copyright or act as administrator of the music copyrights on behalf of the copyright owners.

- Publishing of music and sheet books

30.2 Exclusions

This class excludes:

- Reproduction from master copies of music or other sound recordings, see ISIC Code - 1820
- Wholesale of recorded audio tapes and disks, see ISIC Code – 4649

31. ISIC Code 5914 - Motion Picture Projection Activities

31.1 Inclusions

This class includes:

- Motion picture or videotape projection in cinemas, in the open air or in other projection facilities
- Activities of cine-clubs

32. ISIC Code 6010 - Radio Broadcasting

32.1 Inclusions

This class includes:

- Broadcasting audio signals through radio broadcasting studios and facilities for the transmission of aural programming to the public, to affiliates or to subscribers
- Activities of radio networks, i.e. assembling and transmitting aural programming to the affiliates or subscribers via over-the-air broadcasts, cable or satellite
- Radio broadcasting activities over the Internet (Internet radio stations)
- Data broadcasting integrated with radio broadcasting

32.2 Exclusions

This class excludes:

- Production of taped radio programming, see ISIC Code - 5920

33. ISIC Code 6020 - Television Programming and Broadcasting Activities

33.1 Inclusions

This class includes:

- Creation of a complete television channel programme, from purchased programme components (e.g. movies, documentaries etc.), self-produced programme components (e.g. local news, live reports) or a combination thereof

This complete television programme can be either broadcast by the producing unit or produced for transmission by third party distributors, such as cable companies or satellite television providers.

The programming may be of a general or specialized nature (e.g. limited formats such as news, sports, education or youth oriented programming), may be made freely available to users or may be available only on a subscription basis.

- Programming of video-on-demand channels
- Data broadcasting integrated with television broadcasting

33.2 Exclusions

This class excludes:

- Production of television programme elements (e.g. movies, documentaries, commercials), see ISIC Code - 5911
- Assembly of a package of channels and distribution of that package via cable or satellite to viewers, see ISIC Code - 61

34. ISIC Code 6312 - Web Portals

34.1 Inclusions

This class includes:

- Operation of web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format
- Operation of other websites that act as portals to the Internet, such as media sites providing periodically updated content

35. ISIC CODE 7722 - RENTING OF VIDEO TAPES AND DISKS

35.1 Inclusions

This class includes:

- Renting of video tapes, records, CDs, DVDs etc.

36. ISIC Code 6391 - News Agency Activities

36.1 Inclusions

This class includes:

- News syndicate and news agency activities furnishing news, pictures and features to the media

36.2 Exclusions

This class excludes:

- Activities of independent photojournalists, see ISIC Code - 7420
- Activities of independent journalists, see ISIC Code - 9000

37. ISIC Code 4762 - Retail Sale of Music and Video Recordings in Specialized Stores

37.1 Inclusions

This class includes:

- Retail sale of musical records, audio tapes, compact discs and cassettes
- Retail sale of video tapes and DVDs
- Retail sale of blank tapes and discs

38. ISIC CODE 4791 - RETAIL SALE VIA MAIL ORDER HOUSES OR VIA INTERNET

38.1 Inclusions

This class includes retail sale activities via mail order houses or via Internet, i.e. retail sale activities where the buyer makes his choice on the basis of advertisements, catalogues, information provided on a website, models or any other means of advertising and places his order by mail, phone or over the Internet (usually through special means provided by a website). The products purchased can be either directly downloaded from the Internet or physically delivered to the customer.

This class includes:

- Retail sale of any kind of product by mail order
- Retail sale of any kind of product over the Internet
- Direct sale via television, radio and telephone
- Internet retail auctions



38.2 Inclusions

This class includes:

- Fashion design related to textiles, wearing apparel, shoes, jewellery, furniture and other interior decoration and other fashion goods as well as other personal or household goods
- Industrial design, i.e. creating and developing designs and specifications that optimize the use, value and appearance of products, including the determination of the materials, construction, mechanism, shape, colour and surface finishes of the product, taking into consideration human characteristics and needs, safety, market appeal and efficiency in production, distribution, use and maintenance
- Activities of graphic designers
- Activities of interior decorators
- Activities of associations whose members are employees interested chiefly in the representation of their views concerning the salary and work situation, and in concerted action through organization
- Activities of single plant unions, of unions composed of affiliated branches and of labour organizations composed of affiliated unions on the basis of trade, region, organizational structure or other criteria

38.3 Exclusions

This class excludes:

- Design and programming of web pages, see ISIC Code - 6201
- Architectural design, see ISIC Code - 7110
- Engineering design, i.e. applying physical laws and principles of engineering in the design of machines, materials, instruments, structures, processes and systems, see ISIC Code - 7110
- Theatrical stage-set design, see ISIC Code - 9000

39. ISIC Code 7410 - Specialized Design Activities

39.1 Inclusions

This class includes:

- Fashion design related to textiles, wearing apparel, shoes, jewellery, furniture and other interior decoration and other fashion goods as well as other personal or household goods
- Industrial design, i.e. creating and developing designs and specifications that optimize the use, value and appearance of products, including the determination of the materials, construction, mechanism, shape, colour and surface finishes of the product, taking into consideration human characteristics and needs, safety, market appeal and efficiency in production, distribution, use and maintenance
- Activities of graphic designers



- Activities of interior decorators
- Activities of associations whose members are employees interested chiefly in the representation of their views concerning the salary and work situation, and in concerted action through organization
- Activities of single plant unions, of unions composed of affiliated branches and of labour organizations composed of affiliated unions on the basis of trade, region, organizational structure or other criteria

39.2 Exclusions

This class excludes:

- Design and programming of web pages, see ISIC Code - 6201
- Architectural design, see ISIC Code - 7110
- Engineering design, i.e. applying physical laws and principles of engineering in the design of machines, materials, instruments, structures, processes and systems, see ISIC Code - 7110
- Theatrical stage-set design, see ISIC Code - 9000

40. ISIC Code 7110 - Architectural and Engineering Activities and Related Technical Consultancy

40.1 Inclusions

This class includes the provision of architectural services, engineering services, drafting services, building inspection services and surveying and mapping services and the like.

This class includes:

- Architectural consulting activities:
 - Building design and drafting
 - Town and city planning and landscape architecture
- Engineering design (i.e. applying physical laws and principles of engineering in the design of machines, materials, instruments, structures, processes and systems) and consulting activities for:
 - Machinery, industrial processes and industrial plant
 - Projects involving civil engineering, hydraulic engineering, traffic engineering
 - Water management projects
 - Projects elaboration and realization relative to electrical and electronic engineering, mining engineering, chemical engineering, mechanical, industrial and systems engineering, safety engineering
 - Project management activities related to construction
- Elaboration of projects using air conditioning, refrigeration, sanitary and pollution control engineering, acoustical engineering etc.
- Geophysical, geologic and seismic surveying
- Geodetic surveying activities:



- Land and boundary surveying activities
- Hydrologic surveying activities
- Subsurface surveying activities
- Cartographic and spatial information activities

40.2 Exclusions

This class excludes:

- Test drilling in connection with mining operations, see ISIC Code - 0910, ISIC Code - 0990
- Development or publishing of associated software, see ISIC Code - 5820, ISIC Code - 6201
- Activities of computer consultants, see ISIC Code - 6202, ISIC Code - 6209
- Technical testing, see ISIC Code - 7120
- Research and development activities related to engineering, see ISIC Code - 7210
- Industrial design, see ISIC Code - 7410
- Interior decorating, see ISIC Code - 7410
- Aerial photography, see ISIC Code - 7420

41. ISIC Code 7310 - Advertising

41.1 Inclusions

This class includes the provision of a full range of advertising services (i.e. through in-house capabilities or subcontracting), including advice, creative services, production of advertising material, media planning and buying.

This class includes:

- Creation and realization of advertising campaigns:
 - Creating and placing advertising in newspapers, periodicals, radio, television, the Internet and other media
 - Creating and placing of outdoor advertising, e.g. billboards, panels, bulletins and frames, window dressing, showroom design, car and bus carding etc.
 - Media representation, i.e. sale of time and space for various media soliciting advertising
 - Aerial advertising
 - Distribution or delivery of advertising material or samples
 - Provision of advertising space on billboards etc.
 - Creation of stands and other display structures and sites
- Conducting marketing campaigns and other advertising services aimed at attracting and retaining customers:
 - Promotion of products
 - Point-of-sale marketing



- Direct mail advertising
- Marketing consulting

41.2 Exclusions

This class excludes:

- Publishing of advertising material, see ISIC Code - 5819
- Production of commercial messages for radio, television and film, see ISIC Code - 5911
- Public-relations activities, see ISIC Code - 7020
- Market research, see ISIC Code - 7320
- Graphic design activities, see ISIC Code - 7410
- Advertising photography, see ISIC Code - 7420
- Convention and trade show organizers, see ISIC Code - 8230
- Mailing activities, see ISIC Code - 8219

42. ISIC Code 8522 - Technical and Vocational Secondary Education

Inclusions Exclusions Hierarchy Related Code Systems

42.1 Inclusions

This class includes education typically emphasizing subject-matter specialization and instruction in both theoretical background and practical skills generally associated with present or prospective employment. The aim of a programme can vary from preparation for a general field of employment to a very specific job. Instruction may be provided in diverse settings, such as the unit's or client's training facilities, educational institutions, the workplace, or the home, and through correspondence, television, Internet, or other means.

This class includes:

- Technical and vocational education below the level of higher education as defined in ISIC Code - 853
- Instruction for tourist guides
- Instruction for chefs, hoteliers and restaurateurs
- Special education for handicapped students at this level
- Cosmetology and barber schools
- Computer repair training
- Driving schools for occupational drivers e.g. of trucks, buses, coaches

42.2 Exclusions

This class excludes:



- Technical and vocational education at post-secondary and university levels, see ISIC Code - 8530
- Adult education as defined in ISIC Code - 854
- Performing art instruction for recreation, hobby and self-development purposes, see ISIC Code - 8542
- Automobile driving schools not intended for occupational drivers, see ISIC Code - 8549
- Job training forming part of social work activities without accommodation, see ISIC Code - 8810, ISIC Code - 8890

43. ISIC Code 8530 - Higher Education

43.1 Inclusions

This class includes the provision of post-secondary non-tertiary and tertiary education, including granting of degrees at baccalaureate, graduate or post-graduate level. The requirement for admission is at least a high school diploma or equivalent general academic training. Education can be provided in classrooms or through radio, television broadcast, Internet or correspondence.

This class includes:

- Post-secondary non-tertiary education
- First stage of tertiary education (not leading to an advanced research qualification)
- Second stage of tertiary education (leading to an advanced research qualification)
- Performing arts schools providing higher education

43.2 Exclusions

This class excludes:

- Adult education as defined in ISIC Code - 854

44. ISIC CODE 8542 - CULTURAL EDUCATION

44.1 Inclusions

This class includes provision of instruction in the arts, drama and music. Units giving this type of instructions might be named "schools", "studios", "classes" etc. They provide formally organized instruction, mainly for hobby, recreational or self-development purposes, but such instruction does not lead to a professional diploma, baccalaureate or graduate degree.

This class includes:

- Piano teachers and other music instruction
- Art instruction
- Dance instruction and dance studios



- Drama schools (except academic)
- Fine arts schools (except academic)
- Performing arts schools (except academic)
- Photography schools (except commercial)



