



SOUTH AFRICAN SURVEY OF RESEARCH AND DEVELOPMENT INPUTS

2001/2002

CODES
(RF & SEO Codes)

Research Institutes

and

Museums

Acknowledgements:

These Codes have been compiled with reference to the Organisation for Economic Cooperation and Development (OECD) Frascati Manual.

APPENDIX A: RESEARCH FIELD (RF) CLASSIFICATIONS

Please choose the RF classifications that most appropriately describe the scientific disciplines or fields of research that you are practising.

DIVISION 1 CATEGORY		NATURAL SCIENCES, TECHNOLOGY AND ENGINEERING GROUP
	RF10101	Pure mathematics
Mathematical Sciences	RF10101	
Sciences		Applied mathematics Statistics
	RF10103	1 *
	RF10199	Other mathematical sciences not classified elsewhere
Physical Sciences	RF10201	Astronomical sciences
	RF10202	Theoretical and condensed matter physics
	RF10203	Atomic, molecular, nuclear, particle and plasma physics
	RF10204	Acoustic and optical physics
	RF10205	Solid State physics
***************************************	RF10299	Other physical sciences not classified elsewhere
Chemical	RF10301	Physical chemistry (including theoretical and structural)
Sciences	RF10302	Inorganic chemistry
	RF10303	Organic chemistry
	RF10304	Analytical chemistry
	RF10305	Speciality Chemicals
	RF10399	Other chemical sciences not classified elsewhere
Earth Sciences	RF10401	Gcology
	RF10402	Geophysics
	RF10403	Geochemistry
	RF10404	Occanography
	RF10405	Hydrology
,	RF10406	Atmospheric sciences
	RF10499	Other earth sciences not classified elsewhere
Information,	RF10501	Information systems
Computer &	RF10502	Hardware
Communication	RF10503	Software
Technologies	RF10504	Current information technology
	RF10505	Communication
	RF10506	Security system
	RF10599	Other information, computer & communication technologies not elsewhere
		classified
Applied Sciences	RF10601	Aerospace technologies and engineering
and Technologies	RF10602	Manufacturing and process technologies and engineering
	RF10602	Nuclear technology
	RF10604	Educational technology
	RF10605	Resource-based industry
	RF10606	Energy Industry
	RF10607	Industrial design
	RF10608	Water technology
	RF10699	Other applied sciences and technologies not elsewhere classified
Kaninga-i	RF10701	Mechanical and industrial engineering
Engineering Sciences	RF10701 RF10702	Chemical engineering
QLIENCEA		
	RF10703	Mining and mineral processing
	RF10704	Civil engineering
	RF10705	Electrical and electronic engineering
	RF10706	Agriculture Engineering
	RF10707	Food Engineering
	RF10708	Environmental Engineering
	RF10709	Nuclear engineering and radiation technology

	RF10710	Mcchanisation and design engineering
	RF10711	
	RF10711	Maritime Technology
Di-1i1		Other engineering sciences not elsewhere classified
Biological Sciences	RF10801	Biochemistry
Sciences	RF10802	Genetics and molecular biology
	RF10803	Microbiology
	RF10804	Botany
	RF10805	Zoology
	RF10806	Ecology
	RF10807	Genetic engineering
	RF10808	Biotechnology
	RF10899	Other biological sciences not elsewhere classified
Agricultural	RF10901	Soil and water sciences
Sciences	RF10902	Crop and pasture production (including rice)
	RF10903	Horticulture (including plantation and fruit crops)
	RF10904	Animal production
	RF10905	Veterinary sciences
	RF10906	Forestry sciences
	RF10907	Fisheries sciences
	RF10908	Food and nutrition development
	RF10909	Aquaculture
	RF10910	Plant physiology
	RF10999	Other agricultural sciences not elsewhere classified
Medical and	RF11001	Immunology
Health Sciences	RF11002	Medical biochemistry and clinical chemistry
	RF11003	Medical microbiology
	RF11004	Pharmacology
	RF11005	Physiology
	RF11006	Neurosciences
	RF11007	Clinical sciences
	RF11008	Public health, environmental & occupational health & safety research
	RF11009	Nutrition (public health research)
	RF11010	Health services research (including bioethics)
	RF11011	Health care system, industries and technologies.
	RF11012	Pharmaceutical industry
	RF11099	Other medical and health services not elsewhere classified
Environmental	RF11101	Environmental studies
Sciences	RF11102	Environment technology/industry
	RF11103	Environmental issues and assessment
	RF11104	Environmental management and bioremediation
	RF11199	Other environmental science not elsewhere classified
Material Sciences	RF11201	Electronic materials
are more one threater by	RF11202	Functional materials
	RF11203	Polymeric materials
	RF11204	New materials and technologies
	RF11299	Other material science not elsewhere classified
Marine Sciences	RF11301	Marine biology
MANTHE DUICHCES	RF11301	Algae biotechnology
	RF11302	Fishing technology
	RF11303	Marine chemistry
	RF11399	Other marine sciences not elsewhere classified
	XI 11333	Outer marine serences not eisewhere classified

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DIVISION 2		SOCIAL SCIENCES AND HUMANITIES
CATEGORY		GROUP
Social Sciences	RF20101	Accounting
	RF20102	Economics
	RF20103	Management studies
	RF20104	Political sciences and public policy
	RF20105	Architecture and habitat
	RF20106	Sociology
	RF20107	Archaeology and history
	RF20108	Geography
	RF20109	Population studies
	RF20110	Law
	RF20111	Psychology
	RF20112	Education
	RF20113	Media and communications studies
	RF20114	Finance
	RF20115	Anthropology
	RF20116	Transportation studies
	RF20117	Emerging issues
	RF20118	Technology management
	RF20119	Tourism
	RF20199	Other social sciences not elsewhere classified
Humanities	RF20201	Languages and literature
	RF20202	Historical and civilisation studies
	RF20203	Philosophy
	RF20204	Arts and culture
	RF20205	Religious studies
	RF20206	Dances
	RF20207	Music
	RF20299	Other humanities not clscwhere classified

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APPENDIX B: SOCIO-ECONOMIC OBJECTIVE (SEO) CLASSIFICATIONS

Please choose the SEO classifications that most appropriately describe the sectors of the national economy that will be the main beneficiary of your R&D.

DIVISION 1	DEFENCE	
CATEGORY		GROUP
Defence	\$10101	Defence
	\$10102	Defence Equipment
<u> </u>	S10199	Other defence not elsewhere classified

DIVISION 2	ECONOMIC DEVELOPMENT	
CATEGORY		GROUP
Plant Production	S20101	Field crops
And Plant	\$20102	Plantation crops
Primary	\$20103	Horticultural crops
Products	\$20104	Forestry
	\$20105	Primary products from plants
	S20106	By-product utilisation
	\$20199	Other plant production and plant primary products not elsewhere classified.
Animal	S20201	Livestock
Production and	S20202	Pasture, browse and fodder crops
Animal Primary	S20203	Fisheries products
Products	S20204	Primary & by-products from animals
	S20299	Other animal production and animal primary products not
		elsewhere classified
Mineral	\$20301	Exploration
resources	S20302	Primary mining and extraction processes
(excluding	S20304	First stage treatment of ores and minerals
energy)	S20399	Other mineral resources (excluding energy) not elsewhere classified
Energy	S20401	Exploration
resources	S20402	Mining and extraction
	\$20403	Preparation and supply of energy source materials
	\$20404	Non-conventional energy resources
	S20405	Nuclear Energy
	S20499	Other energy resources not elsewhere classified
Energy supply	S20501	Energy transformation
	S20502	Renewable energy
	\$20503	Energy distribution
	\$20504	Conservation and efficiency
	\$20505	Energy Issues
	\$20599	Other energy supply not elsewhere classified

Manufacturing	S20601	Processed food products and beverages
	S20602	Fibre processing and textiles, footwear and leather products
	S20603	Wood, wood products and paper
	S20604	Human pharmaceutical products
	S20605	Veterinary pharmaceutical products
	S20606	Agricultural chemicals
	\$20607	Industrial chemicals and related products
	S20608	Basic metal products (including smelting)
	\$20609	Industrial mineral products
	S20610	Fabricated metal products
	S20611	Transport equipment
	S20612	Computer hardware and electronic equipment
	S20612	Communication equipment
	S20614	Instrumentation
	S20614 S20615	Machinery and equipment
	S20616	
		Latex product industry
	S20617	Established manufacturing practices supporting technologies
	S20618	Materials performance and processes/ analysis
	S20619	Milling and process materials
	S20620	Synthesis and design of fine and speciality chemicals
<u></u>	S20699	Other manufactured products not elsewhere classified
Construction	S20701	Planning
	S20702	Design
	\$20703	Construction processes
	\$20704	Building management and services
	\$20799	Other construction not elsewhere classified
Transport	\$20801	Ground transport
	S20802	Water transport
	S20803	Air & space transport
	S20899	Other transport not elsewhere classified
Information and	S20901	Computer software and scrvices
Communication	S20902	Information services (including library)
Services	\$20903	Communication services
	S20999	Other Information and communication services not elsewhere classified
Commercial	S21001	Electricity, gas and water services and utilities
Services	S21002	Waste management and recycling
	S21003	Wholesale and retail trade
	S21004	Finance, property and business services
	S21004 S21005	Tourism
	S21003 S21099	Other commercial services not elsewhere classified
E a a se a se e e	S21101	Macroeconomics issue
Economic Framework	\$21101	Microeconomics issue
1 TUME WOFK	S21102 S21103	International trade issues
	S21104 S21105	Management and productivity issues Measurement standards and calibration services
		Measurement standards and calloration services Commercialisation
	S21106	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	\$21107	Socio-economic development
	S21108	Economic development and environment
	\$21109	Human resource management
·· <u>-1-</u>	S21199	Other economic issues not elsewhere classified
Natural	S21201	Soil resources
Resources	S21202	Water resources
	S21203	Biodiversity
	S21204	Bioactive product
	\$21205	Industrial raw materials
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DIVISION 3	SOCIETY GROUP	
CATEGORY		
Health	S30101	Clinical (organs, discases and conditions)
	S30102	Public health
	S30103	Health and support services
	\$30199	Other health not elsewhere classified
Education and	\$30201	Early childhood and primary education
Training	\$30202	Secondary education
	\$30203	Tertiary education
	S30204	Technical and further education
	S30205	Special education
	\$30206	Computer base teaching and learning
	\$30207	Education policy
	\$30208	Teaching
	\$30209	Educational administration
	S30299	Other education and training not elsewhere classified
Social	\$30301	Community services
Development	\$30302	Public services
and Community	S30303	Art, sport and recreation
Services	S30304	International relations
	\$30305	Ethical issues
	S30306	Nation building
	S30307	Urban issues
	\$30399	Other social development and community services not elsewhere classified

DIVISION 4	ENVIRONMENT		
CATEGORY		GROUP	
Environmental	S40101	Climate and atmosphere	
Knowledge	S40102	Ocean	
	S40103	Water	
	\$40104	Land	
	S40105	Nature conservation	
	S40106	Social environment	
	\$40107	River	
	S40199	Other environmental knowledge not elsewhere classified	
Environmental	S40201	Plant production and plant primary products (including forestry)	
Aspects of	S40202	Animal production and animal primary products (including fishing)	
Development	\$40203	Mineral resources (excluding energy)	
	\$40204	Energy resources	
	S40205	Energy supply	
	\$40206	Manufacturing	
	S40207	Construction	
	S40208	Transport	
	\$40209	Information and communication services	
	\$40210	Commercial services	
	S40211	Environmental economic framework	
	S40299	Other environment aspect of development not elsewhere classified	
Environmental	\$40301	Environmental management	
Management &	\$40302	Waste management and recycling	
Other Aspects	\$40399	Other environmental aspects not elsewhere classified	

DIVISION 5	ADVANCEMENT OF KNOWLEDGE	
CATEGORY	GROUP	
Natural Sciences,	S50101	Mathematical sciences
Technologies and	\$50102	Physical sciences
Engineering	\$50103	Chemical sciences
	S50104	Earth sciences
	\$50105	Information, computer and communication technologies
	\$50106	Applied sciences and technologies
	S50107	Engineering sciences
	S50108	Biological sciences
	S50109	Agricultural sciences
	\$50110	Medical and health sciences
	S50111	Multimedia
	S50199	Other natural science, technologies and engineering not elsewhere classified
Social Sciences	S50201	Social sciences
and Humanities	\$50202	Humanities
	\$50203	Cyberlaw
	S50299	Other social sciences and humanities not elsewhere classified