## **Module III**

A Guide to using the

# Organising Framework for Occupations

in skills planning and development



#### **Introducing the Organising Learning System**

Following the 2007 review of the National Qualifications Framework (NQF), the Occupational Learning System (OLS) is proposed as a more job-focused and occupationally directed approach to skills development to meet the continuing skills crisis in South Africa. Guided by the Organising Framework for Occupations (OFO) in which jobs are categorised into generic occupational groups, with related titles, descriptors and tasks, qualifications and certificates will be developed relative to these occupational groups. The development, offering and assessment of qualifications will be guided by the requirements of the Occupational Qualifications Framework (OQF) which defines specific curriculum requirements for occupationally directed learning.

#### Some additions to the alphabet soup ...

#### **OLS - Occupational Learning System**

... proposes an approach to skills development that is focused on learning *to do* the job, described as job-focused and occupationally directed learning.

Its development and implementation is the responsibility of the QCTO and is guided by the OFO and enabled through the OQF.

#### **OFO** - Organising Framework for Occupations

To frame skills development within job requirements requires one to have a clear definition of what the job requires.

The OFO provides this standardised framework within which to understand and describe a range of related jobs. It provides the framework for occupational categories (groups of related jobs) and offers descriptors and tasks for each of these occupational categories.

The OFO offers us a common language to describe the range of jobs in our organisations and sector and to articulate skills needs relative to specific job groups. So in the end we all (organisations, SETAs, providers, assessors, etc.) speak the same language in skills development, perhaps minimising the potential risk of missing each other.



**OQF** - Occupational Qualifications Framework

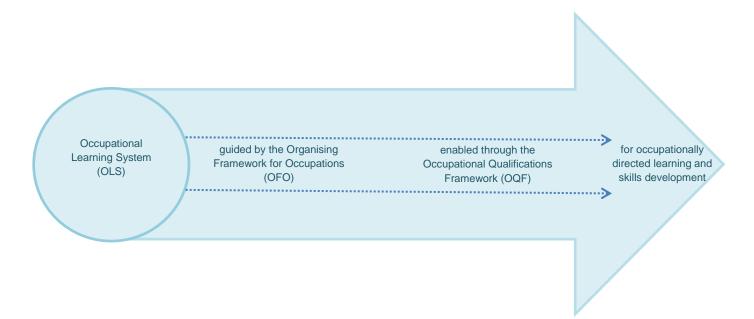
... provides guidelines for developing occupationally directed curricula that meet the job related skills requirements for occupations in the OFO. The OQF defines 3 curriculum components for occupationally directed qualifications, namely: (i) a knowledge component (what one needs to know to do the job effectively; (ii) a practical component (translating the knowledge into work practices) and (iii) a work experience component (an integration of knowing and doing in an authentic workplace. These curriculum components are developed relative to the occupation descriptors and tasks as defined in the OFO.

Skills development in the NQF was structured around 'learning fields' for example, agriculture and nature conservation, physical planning and construction and manufacturing, engineering and technology. A myriad of qualifications were developed in relation to these learning fields, in many cases duplicated across different economic sectors. The review of the NQF recognised that this skills development framework was less effective and efficient in 'hitting the nail on the head' in terms of skills needed for specific jobs or occupations. In response, attempts were made to more closely link skills development to skills needs in specific jobs and occupations. For example, the specific skills required by a Field Ranger in the work that they do on a day to day basis, for example in law enforcement, species monitoring and recording, game

capture, fire management, amongst other job related tasks. This demand driven, occupationally directed learning approach is intended to move skills development away from the generic nature of learning fields and closer to skills development for occupations, such as horticulturists, research managers, environmental managers, research technicians, veterinary technicians, for example. This newly emerging approach to skills development is known as the Occupational Learning System (OLS), the development, implementation and quality assurance of which is the responsibility of the Quality Council for Trade and Occupations (QCTO).

In the OLS, to know what skills development and training is needed, requires a clear framework of occupations within which these needs originate and will contribute to. The Organising Framework for Occupations (OFO) provides the framework for categorising jobs across all economic and service sectors into occupational groupings with a range of titles - including alternative and specialist titles - with clear descriptors and tasks within each occupational grouping.

The development and offering of qualifications and courses and the assessment of learning in the OLS is undertaken in relation to the occupational groupings categorised in the OFO with its specific descriptors and tasks.



This module focuses on the *OFO* as the guiding framework for the *OLS*, its application in skills development and broader human resource processes and the opportunities for engagement in qualifications development to meet skills needs in environment, conservation and natural resource management.

#### **The Organising Framework for Occupations**

The OFO is best described as a skills-based coded classification system that captures all jobs in the form of occupations. It provides the framework for identifying, articulating, reporting and monitoring skills demand and supply in the South African labour market. The OFO is said to have been constructed from the bottom up, by (i) analysing all jobs according to similarities in tasks and skills required; (ii) categorising similar jobs into occupational groupings; and (iii) classifying occupations into these occupational groupings at increasing levels of generality.

Currently in its 10th version the OFO has gone through a 13 year evolution and refinement since 1998, to more accurately reflect jobs in the South African labour market . QCTO continues to call for annual recommendations to further refine this framework.

Essentially the OFO provides everyone working in the realm of skills planning and development with a common language within which to understand and describe the many jobs in our organisations, sector and country as a whole and to define the demand and supply of skills in relation to these jobs. The aim ultimately is to describe all related jobs in occupational groupings, using the same language, irrespective of the nature of your organisation. So for example, the Ecologist will be described relative to the same occupational group whether he / she is employed and works for DEA national office, Eastern Cape Parks and Tourism on a reserve, the City of Cape Town in scientific services or the private conservancy in the Paarl mountains providing input into conservation planning. The Environmental Manager will be described in the same way whether working in the waste management sector, the conservation sector, the forestry sector or food production sector.

#### The structure of the OFO

The OFO is structured according to 5 levels of classification. Each subsequent level of classification is derived from the former. Each major group will have a number of sub-major groups. Each sub-major group will have a number of minor groups. Each minor group with have a number of unit groups. Each unit group has a number of occupations related to it, wherein occupation specific titles, alternative titles and specialist titles are found. This can be visualised using building blocks across the levels.

#### Levels of classification in the OFO

Level 1 Major groups

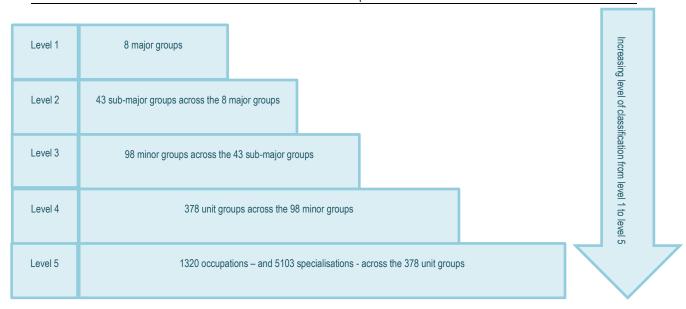
Level 2: Sub-major groups

Level 3: Minor groups

Level 4: Unit groups

Level 5: Occupations, alternative and

specialist titles



#### Level 1: Major groups

The major groups are described by the Department of Higher Education and Training's *Guide to using the OFO* as the highest level of classification where the one is distinguished from the other according to skill level and the broadest concept of skill specialisation. There are eight major occupational groups in the OFO. Each of these has a 1 digit classification code that is carried through each level of classification into the occupational code. Each major group also carries a broad description of the nature of the jobs related to this major group, as well as an overview of related tasks.

Classification code	Major group title	Major group title descriptors
1	Managers	Managers plan, direct, coordinate and evaluate the overall activities of enterprises, government and other organizations, or of organizational units within them, and formulate and review their policies, laws, rules and regulations.
2	Professionals	Professionals increase the existing stock of knowledge, apply scientific or artistic concepts and theories, teach about the foregoing in a systematic manner, or engage in any combination of these activities.
3	Technicians and Associate Professionals	Technicians and associate professionals perform mostly technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations.
4	Clerical Support Workers	Clerical support workers record, organise, store, compute and retrieve information related, and perform a number of clerical duties in connection with money-handling operations, travel arrangements, requests for information, and appointments.
5	Service and Sales Workers	Service and sales workers provide personal and protective services related to travel, housekeeping, catering, personal care, or protection against fire and unlawful acts, or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets.

6	Skilled Agricultural, Forestry, Fishery, Craft and Related Trades Workers	Skilled agricultural, forestry, fishery craft and related trades workers apply specific knowledge and skills to construct and maintain buildings, form metal, erect metal structures, set machine tools, or make, fit, maintain and repair machinery, equipment or tools, carry out printing work
		produce or process foodstuffs, textiles, or wooden, metal and other articles, including handicraft goods and grow and harvest field or tree and shrub crops, breed, tend or hunt animals, produce a variety of animal husbandry products, cultivate, conserve and exploit forests and breed or catch fish.
7	Plant and Machine Operators and Assemblers	Plant and machine operators and assemblers operate and monitor industrial and agricultural machinery and equipment on the spot or by remote control, drive and operate trains, motor vehicles and mobile machinery and equipment, or assemble products from component parts according to strict specifications and procedures. The work mainly calls for experience with and an understanding of industrial and agricultural machinery and equipment as well as an ability to cope with machine-paced operations and to adapt to technological innovations.
8	Elementary Occupations	Elementary occupations involve the performance of simple and routine tasks which may require the use of hand-held tools and considerable physical effort.

Jobs are classified in the major groups according to skill level. Skill level is associated with an occupation and not an individual, and is measured by: (i) formal education and / or training; (ii) work experience; and (iii) amount of on the job training required to competently perform the tasks with an occupation. The OFO is organised around 5 skills levels, which is correlated to the education and training levels of the NQF and the skills levels referred to in the NSDS.

NSDS skills levels	NQF levels	OFO skills level		OFO Majo	or groups	
	10					
Q	9	5	1. MAN	AGERS	2. PROFESSIONALS	
ADVANCED	8					
	7					3. TECHNICIANS
	6	4	5 SERVICE AND SALES WORKERS		4 CLERICAL	AND ASSOCIATE PROFESSIONALS
INTERMEDIATE	5			6. SKILLED TRADE	SUPPORT WORKERS 7. PLANT AND MACHINE OPERATORS AND	
	4	3				OPERATORS AND
ELEMENTARY	3	2		WORKERS		ASSEMBLERS
	2			8. ELEN	MENTARY OCCUPATIONS	
	1	1				

So for example, the jobs for which post graduate professional qualifications are required with extensive experience will be mapped to major groups 1 and 2. Where a professional degree

is required with some experience, these jobs will be mapped into major groups 3, 4 and 5. Where lower level or no academic qualifications are required will be mapped to major groups 6, 7 and 8.

Major groups also define a set of tasks for related occupations. The examples below for major groups 2 and 6 were chosen as bearing some link to the jobs in the environment, conservation and / or natural resource management sectors. As you can see this list of

#### Major Group 2: Professionals

#### Tasks include:

- Conducting analysis and research, and developing concepts, theories and operational methods, and advising on or applying existing knowledge related to physical sciences including mathematics, engineering and technology, and to <u>life sciences</u> including the medical and health services, as well as to social sciences and humanities:
- Teaching the theory and practice of one or more disciplines at different educational levels;
- Teaching and educating handicapped persons;
- Providing various business, legal and social <u>services</u>;
- Creating and performing works of art; providing spiritual guidance; preparing scientific papers and reports;
- Supervision of other workers may be included.

You can find a copy of the OFO version 10 at www.skillsforbiodiversity.org.za
Have a look at the job tasks for each of the major groups.
Complete the following task to familiarise yourself with the OFO job titles, job descriptors and job tasks.

- List any 5 jobs in your organisation. Try to include in your list jobs across the various employment levels and grades;
- Review the key work areas (KWAs / KPAs) of these jobs that you have selected;
- Review the tasks in the OFO major groups;
- See if you can find an initial match between the 5 jobs that you have listed and the major groups in the OFO.
- Use the space below.

tasks is very broad. These tasks provide you with an initial inroad into the OFO to begin mapping your organisations job titles against the OFO occupational codes and titles.

See the underlined tasks in these two examples ... can you link any of the jobs

in your organisation to these ? List these below

,	
Major Group 2	
Major Group 6	

Major Group 6: Skilled Agricultural, Forestry, Fishery, Craft and Related Trades
Workers

#### Tasks include:

- Sowing, planting, spraying, fertilising and harvesting field crops;
- Growing fruit and other tree and shrub crops, garden vegetables and horticultural products;
- <u>Breeding, raising, tending or hunting animals</u> mainly to obtain meat, milk, hair, fur, skin, sericultural, apiarian or other products;
- Cultivating, <u>conserving</u> and exploiting forests; breeding or catching fish; <u>cultivating or</u> <u>gathering other forms of aquatic life;</u>
- Storing, and basic processing of produce;
- <u>Constructing</u>, <u>maintaining</u> and <u>repairing</u> <u>buildings</u> and <u>other structures</u>; casting, welding and shaping metal;
- Installing and erecting heavy metal structures, tackle and related equipment;
- Making machinery, tools, equipment, and other metal articles;
- Setting for operators, or setting and operating various machine tools;
- Fitting, maintaining and repairing industrial machinery, including engines and vehicles, as well as electrical and electronic instruments and other equipment;
- Making precision instruments, jewellery, household and other precious-metal articles, pottery, glass and related products;
- Producing handicrafts;
- Executing printing work; producing and processing foodstuffs and various articles made of wood, textiles, leather and related materials;
- Supervision of other workers may be included.

Task 1: Finding an initial match to the major groups in the OFO

Jobs in my organisation			Possible match	hes to the OFO
Number	Job title	Key Work Areas *	OFO Major Group	Related tasks **
1				
2				
3				
4				
5				

<sup>\*</sup> Use only the key work areas (KPAs) which in most organisations between 4 and 10. Higher level jobs often have more KWAs / KPAs than at lower levels.

The coding system in the OFO for all occupations starts with the one digit of the major group. All occupations in major group 2 for professionals will start with a 2 as in the case of Botanists (OFO code: 213106) and Zoologists (OFO code: 213109). All occupations listed in major group 6 for skilled agriculture, forestry, fisheries, craft and related trade workers start with a 6 as in the case of a Nurseryperson (OFO code: 611304) or Landscape Gardener (OFO code: 611302), more commonly known as Groundsman, Nursery Worker, Nursery Attendant or Tree Breeder in conservation organisations. Look out for this as you work with the OFO.

#### Level 2: Sub-major groups

Each major group has a number of sub-major groups of related occupations. These sub-major groups are the second level of classification and start to go into more detail of the occupational context and related skill.

The 6 sub-major groups for major group 2: Professionals are:

- 21 Physical, Mathematical and Engineering Science Professionals;
- 22 Health Professionals
- 23 Teaching Professionals
- 24 Business and Administration Professionals
- 25 Information and Communications Technology Professionals
- 26 Legal, Social and Cultural Professionals

	Major Groups	No of sub-major groups
1.	Managers	4
2.	Professionals	6
3.	Technicians and Associate Professionals	5
4.	Clerical Support Workers	4
5.	Service and Sales Workers	4
6.	Skilled Agriculture, Forestry, Fisheries, Crafts and Related Trade Workers	8
7.	Plant and Machine Operators and Assemblers	3
8.	Elementary Workers	6

The '2' is the one digit code drawn down from the major group and the second digit, 1-6 is the reference to the specific submajor group.

<sup>\*\*</sup> Choose only those that relate to the job in your organisation. Remember that these tasks cover a broad spectrum of which only some might be relevant to your organisations jobs.

The sub-major groups start to group occupations relative to their particular disciplines, which you can notice from the examples. They also define specific groups of occupations with descriptors of what these professionals typically do and the tasks related to each occupational group. The following example shows the relation between tasks in major group 2 and sub-major group 25.

Mark the words in both

columns that show the

relation between the

major and sub-major

group

From the example above could you guess which sub-major group conservation professionals are likely to be mapped to?

#### Job tasks of major group 2: Professionals

- Conducting analysis and research, and developing concepts, theories and operational methods, and advising on or applying existing knowledge related to physical sciences including mathematics, engineering and technology, and to life sciences including the medical and health services, as well as to social sciences and humanities;
- Teaching the theory and practice of one or more disciplines at different educational levels:
- Teaching and educating handicapped persons;
- Providing various business, legal and social services;
  - Creating and performing
    works of art; providing spiritual guidance; preparing scientific
    papers and reports;
- Supervision of other workers may be included.

### Job tasks of sub-major group 25: Information and Communications Technology Professionals

- Researching information technology use in business functions;
- Identifying areas for improvement and researching the theoretical aspects and operational methods for the use of computers;
- Evaluating, planning and designing hardware or software configurations for specific applications including for Internet, intranet and multimedia systems;
- Designing, writing, testing and maintaining computer programs;
- Designing and developing database architecture and database management systems;
- Developing and implementing security plans and data administration policy, and administering computer networks and related computing environments;
- Analysing, developing, interpreting and evaluating complex system design and architecture specifications, data models and diagrams in the development, configuration and integration of computer systems.

Mark the words in this column that starts to more specifically define this occupation group in job context and specialisation.

Can you identify any job in your organisation that might be mapped to sub-major group 25 as above?

Bear in mind as you work with the OFO that submajor groups have 2 digits, the former drawn from their associated major group and the latter specific to that sub-major group.

Go back to the 5 jobs you identified above.	
Have a look at the details of the descriptor and tasks for each sub-major group in groups that you selected in this task. Which sub-major group would these jobs commapped to?	•
	-

#### Level 3: Minor groups

Minor groups is the third level of classification, going one step more specific towards more discipline specific and context related occupational groupings, for example:

Sub-major group 21: Physical, Mathematical and Engineering Science Professionals

211 Physical and Earth Science Professionals
212 Mathematicians, Actuaries and Statisticians
213 Life Science Professionals
214 Engineering Professionals
215 Electrotechnology Professionals
216 Architects, Planners, Surveyors and Designers

step	
kt	In which minor group would you find your conservation professional?
	Where are you likely to find your
	Conservation Planners?

As in the major and sub-major groups, tasks are defined for minor groups, with more specific reference to the discipline and context, for example:

Job tasks for major group 2 Professionals	Job tasks for sub-major group 21 Physical,	Job tasks for minor group 213 Life Science	
	Mathematical and Engineering Science	Professionals	
	Professionals		
<ul> <li>Conducting analysis and research, and developing concepts, theories and operational methods, and advising on or applying existing knowledge related to physical sciences including mathematics, engineering and technology, and to life sciences including the medical and health services, as well as to social sciences and humanities;</li> <li>Teaching the theory and practice of one or more disciplines at different educational levels;</li> <li>Teaching and educating handicapped persons;</li> <li>Providing various business, legal and social services;</li> <li>Creating and performing works of art; providing spiritual guidance; preparing scientific papers and reports;</li> <li>Supervision of other workers may be included.</li> </ul>	<ul> <li>Conducting research, enlarging, advising on or applying scientific knowledge obtained through the study of structures and properties of physical matter and phenomena, chemical characteristics and processes of various substances, materials and products, and of mathematical, statistical and computing concepts and methods;</li> <li>Advising on, designing and directing construction of buildings, towns and traffic systems, or civil engineering and industrial structures, as well as machines and other equipment, and advising on and applying mining methods, and ensuring their optimum use;</li> <li>Surveying land and sea and making maps;</li> <li>Studying and advising on technological aspects of particular materials, products and processes, and on efficiency of production and work organization;</li> <li>Preparing scientific papers and reports. Supervision of other workers may be included.</li> </ul>	Collecting, analyzing and evaluating experimental and field data to identify and develop new processes and techniques; Providing advice and support to governments, organizations and businesses about ecological sustainable development of natural resources.  Are you beginning to see your conservation professional emerge in the OFO?  Have a look at the KWAs / KPAs of one or more of your conservation professionals and see if a map to the OFO definitions and job tasks become apparent.  Look at major group 2: Professionals and complete the table below for the number of minor groups in each sub-major group.  Sub-major group No of minor groups  21 Physical, Mathematical and Engineering Science Professionals  22  23  24  25  26	

Note that the minor groups have a 3 digit code: for example, 216, the 1<sup>st</sup> digit from the major group, the 2<sup>nd</sup> digit from the sub-major group and the 3<sup>rd</sup> digit for its particular minor group.

#### Level 4: Unit groups

Unit groups start to group together more specifically related occupations. They have a 4 digit code – see below how this code is derived from the major, sub- major and minor group. For example:

#### Minor group 213: Life Science Professionals

2131: Biologists, Botanists, Zoologist and Related Professionals

2132: Farming, Forestry and Fisheries Advisors

2133: Environmental Protection Professionals

groups

Environmental Protection Professionals study and assess the effects on the environment of human activity such as air, water and noise pollution, soil contamination, climate change, toxic, waste and depletion and degradation of natural resources. They develop plans and solutions to protect, conserve, restore, minimize and prevent further damage to the environment.

#### Tasks include:

- Conducting research, performing tests, collecting samples, performing field and laboratory analysis to identify sources of environmental problems and recommending ways to prevent, control and remediate the impact of environmental problems;
- Assessing the likely impact that potential or proposed activities, projects and developments may have on the environment, and recommending whether such developments should proceed;
- Developing and coordinating the implementation of environmental management systems to enable organizations to identify, monitor and control the impact of their activities, products and services on the environment:
- Conducting audits to evaluate environmental impact of existing activities, processes, wastes, noises and substances;
- Assessing an organization's compliance with government and internal environmental regulations and guidelines, identifying violations and determining appropriate remedial action;
- Providing technical advice and support services to organizations on how best to deal with environmental problems in order to reduce environmental damage and minimize financial loss;
- Developing conservation plans

As with all previous levels of classification, the unit group also defines with a greater level of specification a descriptor and tasks typically associated with this occupational group as in the example of unit group 2133 for Environmental Protection Professionals adjacent.

#### Level 5: Occupations and specialisations

Occupations are listed in unit groups, with titles, descriptors and even more specific tasks. In this adjacent example of Environmental Protection Professionals, Conservation Scientist (OFO code 213301) and Environmental Scientist (OFO code 213302) are listed –see below.

Find in OFO version 10, the details for these two occupations. Have a look at the descriptor and tasks. Can you map any of your organisations jobs to these occupations? List these.

Because the OFO is a generic framework, the exact titles used in your organisation are not likely to be found. The OFO does offer alternative and specialist titles which might be more descriptive of the titles used in your organisation. Following through with the examples of Environmental Protection Professionals, alternative and specialist titles offered in the OFO include:

Classification level	OFO Code	Occupation title	
Major group 2:	2	Professionals	
Sub-major group:	21	Physical, Mathematical and Engineering Science Professionals	
Minor group	213	Life Science Professionals	
Unit group	2133	Environmental Protection Professionals	
Occupation	213301	Conservation Scientist	
		Alternative Titles and Specialisations:	
		Animal Ecologist	
		Conservancy Advisory Scientist	
		Conservation Officer	
		Ecological Researcher	
		Ecologist	
		Fish and Games Officer	
		Forestry Conservationist	
		Species Protection Officer	
		Fisheries Advisor	
	213302	Environmental Scientist	
		Alternative Titles and Specialisations:	
		Environmental Advisor	
		Environmental Auditor	
		Environmental Consultant	
		Environmental Officer	
		Environmental Research Scientist	
		Environmental Waste Officer	
		Environmentalist	

See in this example how the occupation code is derived, drawing 1 digit from each of the major, sub-major, minor and unit group with the last 2 specific to the occupational group

Look at the job tasks of these occupations in OFO version 10, which are the same for the alternative titles and specialisation.

Can you find your conservation and / or environmental scientists here?

You might have noticed that throughout the discussion reference was made to the key work areas (KWAs) or key performance areas (KPAs) of jobs and tasks in OFO occupation groups. It is critical that as you attempt to map jobs in your organisation to the OFO codes and occupations that you use the KWAs or KPAs and the tasks in the OFO. The job tasks become more defined as you move from the major to sub-major and minor groups. The unit group is the last level at which job tasks are defined. So ultimately, having used the job tasks of the major, sub-major and minor group to direct you towards an potential OFO match, the defining link or match is done relative to the unit group tasks.

In August 2011, a task team of professionals from conservation agencies and CATHSSETA convened a workshop through which conservation jobs in the sector were mapped to OFO occupations. The intention at the workshop was to:

- Support colleagues in navigating the OFO which can be an intimidating and overwhelming framework, at first sight;
- Map jobs in the conservation sector to occupations in the OFO – though this exercise focused only on conservation, this resource aims to support others in the environment sector to follow a similar exercise of mapping organisational jobs to OFO occupations and codes;

The outcome of this workshop is a map of conservation jobs to OFO codes and occupations. Appendix A shows this map of conservation jobs and the relative OFO occupations and codes.

Any takers for mapping other environmental jobs?

#### Mapping job titles to OFO codes and occupations: A Case Study

The task team who participated in this exercise of mapping conservation jobs included colleagues from Department of Environmental Affairs, both the national office and Oceans and Coasts, South African National Parks, South African National Biodiversity Institute, Gauteng Department of Agriculture and Rural Development, Northern Cape Department of Environment and Nature Conservation, Eastern Cape Parks and Tourism Agency, Kwazulu Natal Wildlife, Endangered Wildlife Trust and WWF-SA. This spanned human resource management and development professionals and operational managers in specific areas of work. This is how the task team mapped conservation jobs ...

### Step .

As far as we know, our colleague in the environment, Presha was the first brave soul to take on the OFOs for the environment sector. Presha trawled through what was then OFO version 9 of the OFO framework and selected all possible occupations related to the environment sector. This selection is attached as Appendix B: Supporting Environment Occupations – Selected OFO Codes.

Members of the task team, through a pre-workshop assignment were asked to:

- list all conservation related job titles in their organisations;
- review the KWAs / KPAs for all jobs we also asked them to collate the descriptions used and bring along to the workshop;
- review the selection of environment related occupations, as per Presha's document and to highlight those that could potentially
  match the job titles they had identified in their organisations;
- look more closely at the tasks in the OFO occupations and where they identified a potential match between the KWAs / KPAs of
  the organisation jobs and to write the relevant OFO code and occupation alongside the organisation job title.

This was completed by the task team prior to the workshop and collated to inform further workshop discussions.

Using the collation of organisation job titles with suggested links to OFO codes and occupations and armed with job titles and descriptions provided by the different conservation agencies, we literally worked through each group of occupations. We collated jobs into occupational groups of (i) executive to senior management; (ii) conservation management; (iii) conservation planning; (iv) conservation science; (v) information management; (vi) community conservation, outreach and education; and (vii) law enforcement. In small groups during this 2-day workshop, the task team:

- reviewed occupation titles, descriptors and tasks in the suggested OFO unit groups in relation to the wide range of job descriptions they had on hand from their respective organisations;
- identified jobs and OFO occupations that had a 75% match to related tasks;
- recommended amendments to those that fell short of 75% to either change and / or add to the OFO descriptor, tasks and alternative titles and specialisations.

#### From this mapping exercise:

- 260 organisation job titles were matched to 49 occupation titles and codes in the OFO;
- 6 occupations in the OFO were recommended for amendment to job tasks to more adequately reflect what professionals in these
  jobs do in the field, including Programme Analyst, Conservation Scientist, Environmental Scientist, Park Ranger, Urban and
  Regional Planner and Environmental Manager.
- 2 titles, with suggested descriptors and tasks were recommended for addition to the OFO, including: to reflect professionals working in community conservation, outreach and education and compliance, which are 2 areas not addressed for the conservation context in the OFO.

## tep 3

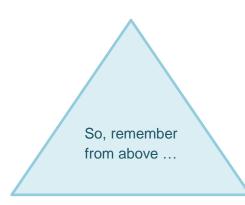
Next steps

CATHSSETA has, with the outcome of this workshop undertaken to prepare and make a submission to the QCTO for amendment and addition to the OFO, as recommended above.

The HRD Network will use this framework of OFO occupations to explore existing courses that respond to skills needs in these occupations and to identify gaps in and prioritise courses for development.

#### Why the OFOs in skills planning

SETAs draw on WSPs submitted by organisations to report on the demand for and supply of scarce and critical skills to the Department of Labour at a national level. SETAs are required to work within the framework of the OFO as intermediaries in carrying this skills information from associate organisations into the national context. It would therefore only make sense that what we feed into the SETA as intermediaries is described in the same language as required at a national level.



... the OFO provides us with a common language through which to understand, describe, collate and communicate skills supply and needs across all economic sectors. So that when we talk of a Permit Officer in OFO language as a Species Protection Officer (code 213301) the interpretation of the skills need is the same at organisation, sector and national level.

#### Some pitfalls to avoid before you start work with the OFOs

➤ The biggest challenge in mapping organisational job titles to the OFO is finding appropriate occupational titles in the OFO. Remember always that you are unlikely to find your organisations exact job titles reflected in the OFO, as this is a generic framework for all jobs across all economic sectors. The most you can hope for is finding the most appropriate match, for example:

	OFO code and occupation a single reference to	Organisation job titles a variety of job titles used in different organisations
213301	Species Protection Officer	Manager: Wildlife Investigation Officer Marine Prosecution Officer Anti-Poaching Officer Anti-Poaching Unit Officer Permitting Officer Permit Officer Permit Officer Manager: Special investigation, risk, security and large mammal operations

Another common challenge in working with the OFOs is that occupations are often confused with alternative titles and specialisations. Occupations refer to '... the group of jobs...' that perform the same or similar tasks. Alternative titles and specialisations offer alternatives to describing this cluster of related jobs that might be more appropriate to your organisational context and job titles. Using the same example as before:

Occupations are a set of related jobs that include the performance of similar or identical job tasks. The OFO works with occupations, occupational groupings or clusters of related jobs that perform the same or similar tasks.

OFO code and occupation	Alternative Titles and
	Specialisations
213301 Conservation Scientist	Animal Ecologist Conservancy Advisory Scientist Conservation Officer Ecological Researcher Ecologist Fish and Games Officer Forestry Conservationist Species Protection Officer Fisheries Advisor

So in effect the organisational job titles listed above, eg. Manager: Wildlife Investigations, Permit Officer, Anti-Poaching Officer, are all mapped to the occupation of Conservation Scientist (OFO code 213301) and to the alternative title of Species Protection Officer (OFO code 213301). Not perhaps called by either of these titles in your organisation, but the job tasks match those of these occupations in the OFO.

A further challenge is trying to find a match to the OFO using only the occupation title and descriptor. The essence of the occupation is in fact in the tasks associated with that occupation. So one needs to compare the KWAs / KPAs found in a job description in your organisation and compare this to the tasks defined for occupations in the OFO to find the most appropriate match. For example:

OFO OCCUPATIONS	ORGANISATIONAL JOB TITLES
213301 Conservation Scientist	
Alternative Title *: Ecologist	Organisational Title: Ecologist
Descriptor **: Develops and implements programs and regulations for the	Job Purpose***: To support biodiversity conservation in the Eastern Cape
protection of fish, wildlife and other natural resources.	Province through the provision of sound scientific and ecological advice and
	information to the Eastern Cape Parks and associated stakeholders.
Tasks include:	Key Performance Areas:
1. Conducting research, performing tests, collecting samples, performing	Develop biodiversity management policies and procedures.
field and laboratory analysis to identify sources of environmental	Provide scientific/ecological advisory service to the organisation and
problems and recommending ways to prevent, control and remediate the	other relevant stakeholders.
impact of environmental problems;	Develop implement and co-ordinate research projects to address priority
2. Assessing the likely impact that potential or proposed activities, projects	information needs.
and developments may have on the environment, and recommending	Develop, implement and co-ordinate biophysical monitoring

whether such developments should proceed;

- 3. Developing and coordinating the implementation of environmental management systems to enable organizations to identify, monitor and control the impact of their activities, products and services on the environment:
- 4. Conducting audits to evaluate environmental impact of existing activities, processes, wastes, noises and substances;
- Assessing an organization's compliance with government and internal environmental regulations and guidelines, identifying violations and determining appropriate remedial action;
- Providing technical advice and support services to organizations on how best to deal with environmental problems in order to reduce environmental damage and minimize financial loss;
- 7. Developing conservation plans.

- programmes to address priority information needs.
- 5. Contribute to reserve management planning.
- 6. Contribute towards the implementation of integrated environmental management affecting the reserves.
- 7. Contribute to regional and national biodiversity conservation initiatives.
- 8. Data Management.
- 9. Manage and co-ordinate external research projects.
- 10. Engage in institutional education, training and mentorship.

#### NOTE:

- \* Ecologist is an alternative title in the Conservation Scientist occupation of the OFO;
- \*\* tasks are defined for the unit group of Environment Protection Professionals (2133) within which the Conservation Scientist occupation and alternative and specialist title of Ecologist falls (213301).
- \*\*\* the descriptor can be matched to the defined job purpose on a job description, as in this example.
- Another challenge to keep in mind when mapping job titles to the OFO is the differing skills levels of occupations as earlier defined relative to the major groups. For example, managers and professionals are most likely qualified at a post graduate level with extensive experience and a more complex series of job tasks. Other job titles linked to professional qualification and job tasks with greater complexity are those in major groups 3, 4 and 5. Whereas job titles that require lower levels of qualification and involves less complexity in job tasks would be linked to major groups 6, 7 and 8. So one is likely to find a match for a Botanist professionally qualified at a post graduate level with a high degree of complexity of tasks in major group 2. And a Groundsman where a relatively lower level of qualification is demanded with less job task complexity is likely to be found at major group level 8. For example:

OFO code and occupation	Organisation job titles
112101 Director	Director: Nature Conservation
	General Manager: People and Conservation
	Chief Director: Oceans and Coastal Research
213107 Marine Biologist	Marine Biologist
	Coastal and Marine Ecologist
	Marine Ecologist
314101 Life Sciences Technician	Priority Species Technician
	Research Assistants
	Bioregional Planning Technician
<b>6</b> 11304 Nursery Worker	Nursery Worker
	Nursery Attendant
	Tree Breeder
821203 Game Farm Worker	Animal Attendant

#### Mapping your organisation's job titles to the OFO

DHET provides guidelines for mapping your organisation's job titles to the OFOs, which have been adapted for the purposes of this resource. The guidelines herein similarly draw on the case study of mapping conservation job titles to the OFO.

The Department of Higher Education and Training offer a

Guide to Using the Organising Framework of Occupations

see www.skillsforbiodiversity.org.za

## Getting the right too

- The first step in mapping job titles to occupations in the OFO framework is to familiarise yourself with version 10. We have posted a copy of this on the <a href="https://www.skillsforbiodiversity.org.za">www.skillsforbiodiversity.org.za</a>.
- You might also want to work through the first part of this module to better understand how the OFO is structured and your
  options for mapping job titles to occupations.
- The section above on avoiding the pitfalls might also be useful to consider as you go along.
- As in our case study above, some initial leg work has also been done in Appendix A: Conservation Jobs Mapped to OFO
  Occupations and Appendix B: Supporting Environmental Occupations: Selected OFO Codes.

# Surveying the landscape

2

- List all job titles in your organisation.
- Remove all indicators of seniority where this does not have a bearing on qualification levels, experience and complexity of job task. For example, in the case of a Senior Ecologist and Ecologist, the latter might report to the former, and the tasks might differ in terms of support and oversight, but ultimately the job tasks that they engage with is likely to be the similar or the same. The same applies for example to the Principal or Senior Field Ranger. However, where you have a Research Programme Manager, a Researcher and a Research Assistant, you might want to retain these as the levels of complexity of the job in terms of engaging in research could be different see example above. This one can only assess however in knowing the job descriptions intimately. This exercise will serve to reduce the list of organisation titles you ultimately need to map to the OFO.
- Cluster related job titles. In the case study of conservation job titles above we used: conservation management, conservation, science, conservation planning, information management, community conservation, outreach and education, law enforcement and strategic management. Depending on your organisational context this will differ, but a good indicator could be your organisational (departmental / unit / programme) structure.
- Within each cluster you might also want to create a sub-cluster at different skills levels see the indicators in the section on major groups above.
- Collect and collate job descriptions and organise these relative to the list of job titles for easy reference.

## Finding a match

- Work through one cluster at a time. In the case study we started with Executive and Senior Management in major group 1 for
  managers to get these out of the way easy enough. We then moved on to potential matches in major group 2, ie. job titles for
  which professional qualifications are required eg. scientist, conservation managers etc.
- Use a 2 column table as below. Work down column 1 first drawing from your job descriptions, and when you have found a match to the OFO, complete column 2. Follow the example as below:

Organisation Job Title: Executive Director: Conservation

Job description / Purpose: To develop a functional, competent
and sustainable organisation with particular emphasis on the
efficient and effective implementation of best practice
biodiversity conservation.

**OFO Occupation and Code:** 112101 Executive Director \* **Occupation Descriptor:** Determines, formulates and reviews the general policy program and the overall direction of an organisation, within the framework established by a board of directors or a similar governing body\*\*

#### Tasks include:

- Manage the biodiversity conservation team in support of the strategic plan;
- Co-ordinate the business planning and reporting of the Biodiversity Conservation Division;
- Ensure appropriate and effective planning of the activities of the Biodiversity Conservation Division;
- Develop biodiversity conservation policies and decision making procedures and systems;
- Manage the biodiversity knowledge systems;
- Ensure compliance with biodiversity legislation and policy;
- Ensure an efficient and effective operation of the Biodiversity Conservation Division;
- Contribute toward developing the strategic direction;
- Render Risk Management Services;
- Perform EXCO membership functions.

#### Note in the 2<sup>nd</sup> column that:

- \* Executive Director is an alternative title for the occupational group Director.
- \*\* This is the descriptor for the occupation Director and not the unit group 1121 for Managers and Directors
- \*\*\* This is the level at which the match is found, drawing on the tasks included for the unit group 1121 for managers and directors.

REMEMBER: YOU ARE NOT LOOKING FOR A PERFECT ONE ON ONE MATCH. YOU'RE NOT LIKELY TO FIND IT. THE BEST YOU CAN DO IS LOOK FOR A NEAR MATCH OF APPROXIMATELY 75%.

#### Tasks include\*\*\*:

- Establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;
- Authorising material, human and financial resources to implement organizational policies and programs;
- Consulting with senior subordinate staff and reviewing recommendations and reports;
- Determining objectives, strategies, policies and programs for the enterprise or organization;
- Ensuring the organization complies with relevant legislation and regulations;
- Establishing and managing budgets, controlling expenditure and ensuring the efficient use of resources;
- Monitoring and evaluating performance of the organization or enterprise against established objectives and policies;
- Planning, directing and coordinating the general functioning of an enterprise or organization
- Providing overall leadership and management to the enterprise or organization;
- Representing the organization at official occasions and board meetings, in negotiations, at conventions, seminars, public hearings and forums;
- Representing the organization at official occasions, in negotiations, at conventions, seminars, public hearings and forums;
- Reviewing the operations and results of the enterprise, or organization, and reporting to boards of directors and governing bodies;
- Selecting, or approving the selection of senior staff

Keeping record

- Remember that all skills planning and reporting must be done according to the OFO. We recommend that your matches from job titles to the OFO occupations be recorded for future use.
- We have used an excel spread sheet for this recording, where we listed the OFO code and occupation (using the alternative or specialist title where this was available) and in the opposite column listing all organisational job titles that were matched to a particular OFO code and occupation see Appendix A: Map of conservation job titles to OFO occupations.

## Using the OFO codes in workplace skills planning

CATHSSETA's SDF Guide states that '... the content of a WSP is governed by law and as such, the provision of some information is mandatory and includes ...' amongst others, (i) the employment profile split per job type (ie, OFO code), per race, per gender; and (ii) the number of people planned to be trained in the organisation by job type (ie, OFO code), per

CATHSSETAs 2010 Skills Development Facilitators Guide describes the OFO as a skills-based coded classification system, which encompasses all occupations in the South African context. It replaces the previous Standard Occupational Categories (SOC codes). This SDF guide also provides guidelines for mapping jobs to the OFO – see www.cathsseta.org.za

race, per gender. It further states that '... the SDF must identify both scarce and critical skills at the OFO 6 digit occupational level and scarce skills should be considered against

the occupation itself ... '(ie OFO code); critical skills should be reflected as specific skills within the occupation ...' (ie OFO code). From this it is evident that CATHSSETA, as with all other SETAs, define skills needs relative to the OFO occupational codes. That means that WSPs similarly have to be done relative to the OFO occupational codes. And to do this, skills needs have to be identified and described relative to the OFO occupational codes, which requires a mapping of your organisational job titles to the OFO codes.

As a sector we have started to do some of this work. You might find the guidelines above and the methodology used for mapping conservation job titles useful to complete the map for your organisation.

#### So what happens if I can't find a match for one or more of my job titles?

You might find that in one or more cases you are unable to find a match in the OFO. When mapping the conservation job titles this was the case for:

- . Compliance related jobs, such as Field Ranger, Compliance Officer, Staff Sergeant, Park Wardens and District Conservation Officials.
- Community and socially related jobs, such as Social Ecologists, Manager, Social Science Research, Community Conservation Manager, People and Parks Manager, Co-ordinator: Social Planning, Community Conservation Officer, Community Outreach Officer and Community Facilitator.
- Education related jobs, such as Environmental Educator, Environmental Education Officer and Interpretation Officer.

DHET facilitates a process of amendment to the OFO annually. Version 10 is currently being used. SETAs, through interaction with their constituencies make recommendations to DHET for additions of titles. Through the mapping of conservation job titles, CATHSSETA, through collaborations with the sector are supporting submissions for the inclusion of occupations related to compliance, community conservation and education. In these submissions:

- The submission has to go to DHET via a SETA and cannot come from an individual organisation as it has to be a representative of the sector as a whole:
- The development of the submission must be done through a consultative process across constituent organisations, as it is similarly a sector based submission;
- A case must be made for this inclusion based on scope of occupations in organisations, significance and relevance of this occupation to the core business of organisations across the sector;
- An individual organisations needs is unlikely to be entertained;
- Submissions should ideally include the suggested occupation, descriptor and tasks, which we have done drawing on job descriptions across
  conservation organisations.

Ultimately befriend and work with your SETA of registration to bring about any additions to the OFO !!!

#### Almost, but not quite ...

You might also find in some cases that you cannot find an appropriate match for your organisational job titles, where for example the job descriptor doesn't quite capture the essence of the job or there are glaring gaps in the tasks. In the conservation job titles mapping exercise, we agreed that:

- We won't get caught up with trying to get the titles of occupations amended as these serve mainly as a reference. So for example, Park Ranger is not a job title typically used for our conservation managers and professionals, but we felt it more important to focus on an amendment to the descriptor and tasks in submissions via CATHSSETA to DHET. We agreed as a group to live with the title of Park Ranger, since our submissions cannot work towards a grand scale revision of what is a generic framework, but needs to focus on what is most important in the framework. So think about what you are able to comfortably 'live with' in the OFO.
- Where we found glaring gaps in descriptors and tasks, and where we thought it important to recommend additional alternative and specialists titles, recommendations were made in this regard. For example, a recommendation was made to amend the descriptor of Park Ranger (code 213307) to include greater emphasis on reserve manager and other conservation areas, such as botanical gardens not currently accommodated for in this descriptor. The submission will also include recommendation for 3 additional tasks that speak to managing assets in the conservation space, managing the necessary infrastructure, for example in tourism and financial and human resource management felt to be key work areas in this job. A suggested addition is also being made to alternative and specialist titles in this occupation to include more emphasis on reserve or conservation estate management, such as Garden Curators in SANBI.
  - Don't aim for rewriting the OFO to suit your own organisational context. Bear in mind that the OFO is a generic framework for all jobs across all economic sector in South Africa. Work towards a comfortable match of about 75 % and live with the difference.
  - Try to aim for inclusion of an additional title in the alternative or specialist title as a first step into the framework. It could grow into an occupation from there.
  - If the relevance and significance of the title is realised, it will grow from there into an occupation.

Again, befriend your SETA, a good ally in working with the OFO.

The HSRC undertook an analysis of skills demand through a review of newspaper advertisements over a 3 year period. 3 national newspapers were analysed and 125,000 jobs identified. These 125,000 jobs could be categorised into 28,000 unique jobs that were being advertised. Using the OFO the HSRC could identify 1,200 occupations from these 28,000 jobs and 125,000 adverts.

The 125,000 jobs were developed in diverse contexts, but could be reduced to 28,000 unique jobs. Further classified using the OFO occupational categories, what was 125,000 could be reduced to 1,200. This example reflects the potential of the OFO to work towards job categorisation and greater standardisation. In a small organisation this is perhaps not that significant. But think of its significance in an organisation with between 500 and 1000 employees. What then still at a sector level where millions are employed, and in a country where multi-millions of people are employed in diverse sectors.

Some advice

from the experts

#### Working with the OFO in human resources management

The OFO is also useful in profiling and describing labour needs in an organisation and provides a useful framework for human resource management. Providing a generic framework that requires contextualisation at the organisational level, the OFO can be used for:

➤ Aligning job profiles. One of the key challenges in human resource management is the misalignment of jobs, within and across the sector and sometimes even within an organisation itself. The OFO provides the framework for greater standardisation within and across organisations in a sector through aligning job profiles to the OFO descriptors and tasks. For example, all organisational job profiles as in the job examples below could be aligned to the descriptor and tasks for the Data Management Manager (code 133103) in the OFO. That way the BGIS Manager in SANBI will have a similar job profile as the Biodiversity Information Manager in Eastern Cape Parks and Tourism Agency and the IT 4 Conservation Manager at the Endangered Wildlife Trust, contextualised to the specific organisations' needs.

OFO code and title	Organisational jobs	
133103 Data Management Manager	BGIS Manager	
	SABIF Manager	
	SIBIS Manager	
	Biodiversity Information Manager	
	Biodiversity Knowledge Manager	
	Biodiversity Data Manager	
	Biodiversity Database Manager	
	Biodiversity information management and dissemination	
	IT 4 Conservation Manager	
	Eco-Advice Co-ordinator	
	Eco-Advice - Coastal Systems Manager	
	Plant Records Officer	
	Wildlife Crime Database Controller	

➤ Developing contextualised job advertisements. As above in aligning job profiles to the occupation titles, descriptors and tasks of the OFO, these standardised job profile provide the basis for advertising jobs relative to the generic skills defined in the OFO. These naturally then need to be contextualised into the specific organisational context in which the job is being advertised. This could aid the reading of and responses to various advertisements through a standardised and clearer articulation of job requirements.

- ➤ Guiding performance management. The occupation descriptor and tasks outlined in the OFO relative to unit groups could provide useful guidelines for developing key performance indicators in performance management systems. This could improve standardisation of performance management across similar positions in the organisations and potentially minimise subjective assessments, a common challenge in performance management processes.
- ➤ Guiding career development. You will find in mapping jobs to the OFO that related jobs at different levels often fall into the same occupational grouping. This could facilitate vertical and horizontal career progression within a specific occupational grouping. It could similarly enable the move from one to another occupational grouping, for example from major group 3 to major group 2 and onto major group 1. This framework could make more explicit opportunities for career growth across occupational groupings. See for example, Appendix A: Map of conservation jobs to the OFO and below:

213307 Park Ranger	Conservation Manager	Curator - Gardens	National Stewardship Policy Manager	Integrated Coastal Management
	Protected Area Manager	Estate Manager	Stewardship Manager	
	Reserve Manager	Δ		Urban Conservation Area Manager
	Assistant Reserve Manager			
	Assistant Reserve Manager  Nature Conservator			
	Assistant Nature Conservator	HORIZONTAL CAR	EER PROGRESION	>
	Regional Ranger			
	Ranger Corporal			
	Ranger Sergeant			
	Senior Section Ranger			
	Assistant Section Ranger		>	Biodiversity Conservation Co-ordinator
	Section Ranger			
	Duty Ranger			

OFO code	Org. job title	OFO code	Org. job title	OFO code	Org. job title
				112101 Executive Director	Executive Director: Biodiversity Management
					Î
				112101 Director	General Manager: Biodiversity Conservation
		213307 Park Ranger	Conservation Manager		
			<b>^</b>		
		213301 Conservation Scientist	Nature Conservator		
314101 Life Sciences Technician	Biodiversity Officer				

#### **The Occupations Qualification Framework**

3 qualifications sub-frameworks have been defined in the revision of the NQF, which include:

- General and Further Education Qualifications Framework (GFEQF) which is the responsibility of the Umalusi Quality Council and spans education and training in schools and further education and training institutions;
- Higher Education Qualifications Framework (HEQF), the responsibility of the Higher Education Quality Council and spans academic training at university level from advanced certificates through bachelors' degrees, post-graduate diplomas, masters and doctoral degrees;
- Occupational Qualifications Framework (OQF) the responsibility of the Quality Council for Trades and Occupations and focuses on occupationally directed learning.

Though this module focuses only on the OQF, the following diagram provides a framework within which to understand its role and function in skills development relative to general, further and higher education.

QUALIFICATION	LEARNING	QUALIFICATION	LEARNING	QUALITY	NQF LEVEL	QUALITY	LEARNING		QUALIFICATION	
Doctoral					NQF 10					
Degree				프	NOTO					
Masters				윘	NQF 9					
Degree			Ş	HIGHER EDUCATION QUALITY COUNCIL	NOTA					-
Post-grad			UNIVERSITIES	JUCA	NQF 8				Z	NATIO
Diploma			RSITI	TION	1105.5	QU/			ATIO	IANC
Bachelors			IES	N QU	NQF 7	Ę			N <sub>A</sub> L	- SK
Degree				ALIT		60			000	STI
Adv.				ү сс	NQF 6	UNC	_		ÜΡΑ	CER:
Certificate				JUNC		IL FC	VOR		TION	TFIC
		1		¥	NQF 5	)R Tr	Ā V		IAL A	ATE
Adv.		NOO			NOE 4	<b>R</b> ADE	WORKPLACE-BASED		WAR	S NQ
NC (V)	田	NSC			NQF 4	ANI	3ASE	FO	NDS I	F H
	) 1	Grade 12			NOTO	000	Ö	UND	Ş Ş	.VEL
NC (V)	FET COLLEGES	NSC			NQF 3	QUALITY COUNCIL FOR TRADE AND OCCUPATIONS		ATIO	NATIONAL OCCUPATIONAL AWARDS NOF LEVEL 1 TO 9	NATIONAL SKILLS CERTIFICATES NOF LEVEL 1 TO 10
Level 3	GES	Grade 11			NOTO	ATIC		NAL	1	10
NC(V)		NSC	SCH	UMALUSI	NQF 2	SNS		LEA	109	
Level 2		Grade 10	2					RNI		
ABET	×	GETC	S					FOUNDATIONAL LEARNING COMPETENCE		
4	WORKPLACE	Grade 9			NOE 4			OMP		
ABET	PLA(	Grades 1			NQF 1			ETE	Adapted fro National Sk	m The ills
1 to 3	m	to 8						NCE	Developme Handbook 2	nt

#### Qualifications and certificates in the OQF

Qualifications and certificates in the OQF span the full spectrum of NQF levels from 1 to 10. Learning through the OQF is occupationally directed, as opposed to the GFEQF which provides for foundational learning and the HEQF which focuses on academic and discipline based learning.

The Skills Development Act (1998) defines an occupational qualification as one "...associated with a trade, occupation or profession, resulting from work-based learning and consisting of knowledge, practical and work experience standards'. Qualifications or part qualifications are awarded on the basis of competence to perform within and relative to a specific occupation. This ability to perform competently is described as applied competence - sometimes also referred to as occupational competence - and integrates three components:

- Conceptual knowledge, theory and information specific to a particular occupation;
- Practical and applied skills as it relates to a specific occupation; and
- Workplace-based experience within the specific occupation.

Learning in the OQF as is evident in these three competences is strongly occupationally directed and workplace-based and culminates in three kinds of qualifications and certificates:

> The National Occupational Award (NOAs) certifies that a person is competent to perform an occupation in its totality, with understanding, the requisite practical skill and workplace-based experience. NOAs are recognised by their title which is made up of:

National Occupational Award + OFO occupational title + NQF level + specialisation and context National Occupation Award: Park Ranger Level 6 for example: Specialisation: Reserve Management

- > The National Skills Certificate (NSC) responds to the need for smaller units of competence other than the full occupational award. The NSC certifies a practitioner competent for an occupationally-related set of skills (not the entire occupation). Some contexts in which the NSC is more effective than the NOA include:
  - To respond to a particular specialisation in an occupation, for example, GiS skills in conservation planning or EIA training for Environmental Managers;

- Innovation and development might require the acquisition of a new set of occupationally related skills, for example, social learning processes for Stewardship Extension Officers or Curriculum and Assessment Policy Statement training for Environmental Educators;
- NOAs might be cumbersome and less effective for lower level occupations where an NSC might provide a more focused approach in responding to skills needs;
- Regulatory authorities might require some form of licencing for which practitioners would be required to demonstrate competence, for example, firearms licencing for Field Rangers or first aid training.
- Some jobs are made up of a group of discrete job tasks and the NSC could respond to very specific training needs within a job task.
- Foundational Learning Competence (FLC) is standardised 'learning assumed to be in place' for all occupational qualifications from levels 2 to 4 of the NQF and addresses communications and mathematical literacy required within an occupation. FLC focuses on foundational learning competence to access and progress through occupational learning.

#### Learning components in the OQF

Occupationally directed curriculum in the OQF has 3 learning components related to the three areas of competence described above. In qualifications development processes these learning components are also referred to as curriculum components. Together these learning or curriculum components specify requirements to be covered in a qualification or certificate. Each learning component must constitute at least 20% of the full curriculum. The balance of 40% can be allocated across the three curriculum components deemed as appropriate by the Community of Expert Practitioners (CEP - see below and module I).

Learning components in occupational qualifications and certificates					
Conceptual knowledge theory, information	Minimum 20%	Balance of 40% allocated across			
Practical and applied skills	Minimum 20%	the 3 learning components as appropriate and			
Work experience	Minimum 20%	decided by CEP			

- Knowledge components must be addressed in the curriculum through the identification
  of knowledge and theory general to the occupation as well as specialised and contextual
  knowledge and theory.
- Practical skills development can be enabled in a simulated work space and focuses on practice of the occupation.
- Work experience must be undertaken in a real and authentic workplace and provides an
  opportunity for the integration of knowledge and practice and its application in the real
  work context.

Learning in the OQF is therefore a combination of learning in the formal context and learning in the workplace.

Knowledge and theory	Practical skills	Work experience
General and specialised and contextual	Applying knowledge and theory and development of skills	Integrating knowledge, theory and practice in an authentic work environment

Formal learning context Workplace-based learning

#### Developing qualifications in the OQF

Qualifications are developed by a Development Quality Partner (DQP). The DQP is drawn from a CEP and can be professional bodies, occupational institutes and associations, employer associations, trade unions, research institutes or the SETA. CATHSSETA for example could register as a QDP for the qualifications development of related to conservation occupations through the Conservation Chamber.

CEP

Community of Expert Practitioners

Is a group of practitioners in a specific occupation and knowledgeable about current practices in an occupation.

For example, conservation professionals, environmental educators, information managers, scientists etc.

The DQP leads the process of qualifications development drawing on the CEP through the process for consolidation and validation of developments and decisions made in developing qualifications and certificates. Generally the process involves:

	Activity	Output	Consultations	
Step 1	Identify the occupation for which a qualification or skills programme is needed.	qualification or skills programme is descriptor and tasks verified		
Step 2	Profile the occupation in terms of applied competence (knowledge, practical skills and work experience)	Occupational profile in line with the OFO unit group title, descriptor and tasks	Community of expert practitioners	
Step 3	Design learning process and identify subjects and topics necessary for knowledge component	Learning framework and subjects and topics for knowledge component	Lecturers, trainers and providers	
Step 4	Validate learning process with broader constituency	Approved learning framework	Community of expert practitioners	
Step 5	Develop assessment guidelines	Sample assessment tasks and exemplars	Lecturers, trainers and providers	
Step 6	Qualification and certificates developed	Registered qualifications and certificates	Qualification Development Facilitator	

The development of qualifications is a broadly consultative process and requires ongoing interactions with the CEP who are the occupational practitioners familiar with the intimate details of the job. It is however not feasible for all practitioners to be involved all the time. The following diagram shows the various points in the process that does require inputs from the broader constituent CEP. These are points at which practitioners in the field can make their inputs into qualifications development processes.

