



The PSETA Sector Skills Plan Update for 2016-2017

Public Service Sector Education and Training Authority
(PSETA)

**FINAL FOR SUBMISSION TO DHET
August 2015**



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

SIGNING OFF OF THE PSETA SECTOR SKILLS PLAN 2016/17

We, the undersigned, hereby endorse and approve, on behalf of the Public Service Sector Education and Training Authority (PSETA) and Management, the contents of the Sector Skills Plan Update for the year 2016–2017.

Signature:  Date: 31/07/2015
PSETA CEO

Signature:  Date: 31/07/15
PSETA CHAIRPERSON

Signature:  Date: 31/07/15
National Education Health Allied Workers Union

Signature:  Date: 31.07.2015
Public Servants Association

Signature:  Date: 03/08/2015
Police and Prisons Civil Rights Union

Signature:  Date: 03/08/2015
Department of Public Service and Administration

Contents

List of figures and tables	4
Acronyms	5
Executive Summary	6
Chapter 1: Sector Profile	8
1.1. Introduction	8
1.2. Scope of coverage	8
1.3. Key role players.....	10
1.4. Economic performance.....	11
1.5. Labour market profile	12
Chapter 2: Key Skills Issues	19
2.1. Introduction	19
2.2. Change drivers	19
2.3. Alignment with national strategies and plans	23
Chapter 3: Extent of skills mismatches	25
3.1. Introduction	25
3.2. Extent and nature of demand.....	25
3.3. Extent and nature of supply	30
3.4. Identification of scarce skills and skills gaps.....	40
Chapter 4: Sector Partnerships	44
4.1. Introduction	44
4.2. Existing partnerships.....	44
4.3. New partnerships.....	46
Chapter Five: Skills priority actions	48
5.1. Introduction	48
5.2. Findings from previous chapters	48
5.3. Recommended actions	50
References	56
Appendix One: Description of the Major Occupational Classification/Groups used in Persal58	
Appendix Two: Note on data sources.....	60

List of figures and tables

Figure 1: Graduates from all public higher education institutions in South Africa, 2009-2013	32
Figure 2: PSETA approach to identifying priority skills for the public service	49
Table 1: Organisations reporting only to PSETA	9
Table 2: Sector contribution to Gross Domestic Product, 2015	11
Table 3: Formal employment by the public, private and non-profit sectors, 2015	12
Table 4: Number of people employed in the public service under the Public Service Act, 2015	13
Table 5: Employment in the public service under the Public Service Act by gender, 2015	13
Table 6: Employment in the public service under the Public Service Act by race, 2015.....	14
Table 7: Years of service for those employed under the Public Service Act, 2015	15
Table 8: Public service employment by Persal Major Occupational Category, 2015	16
Table 9: Public service employment by Persal Major Occupational Category, for Public Servants employed under the Public Service Act, 2015	16
Table 10: Persal major occupational category by race for the public service, 2015	17
Table 11: Qualification levels of personnel employed in local, provincial and national government, 2015.....	18
Table 12: Change in number of people employed in the Public Service, 2012 to 2015.....	20
Table 13: Reasons for officials leaving the Public service over the 2014 to 2015 period	21
Table 14: Vacancy rates and numbers in the public service per Persal Major Occupational Category, 2015	25
Table 15: Vacancy rates and numbers in the public service per Persal Unit Occupational Category, for those employed under the Public Service Act, 2015 – showing vacancies of more than 5% or more than 10 personnel	26
Table 16: Graduates at all Higher Education Institutions in South Africa, 2013	33
Table 17: Number and percentage of students in public and private TVET college who wrote and passed by qualification type, for 2011, 2012 and 2013.....	34
Table 18: List of scarce and critical skills	42

Acronyms

CESM	Classification of Educational Subject Matter
CETA	Construction Education and Training Authority
CHE	Council for Higher Education
CIP	Compulsory Induction Programme
COGTA	Department of Cooperative Government and Traditional Affairs
DHET	Department of Higher Education and Training
DIRCO	Department of International Relations and Cooperation
DPME	Department of Performance Monitoring and Evaluation
DPRU	Development Policy Research Unit
DPSA	Department of Public Service and Administration
DTI	Department of Trade and Industry
ETDPSETA	Education, Training and Development Practices Sector Education and Training Authority
FASSET	Finance, Accounting, Management Consulting and other Financial Services Sector Education and Training Authority
GSETA Forum	Government Sector Education and Training Authority Forum
GTAC	Government Technical Advisory Centre
Home Affairs	Department of Home Affairs
HEMIS	Higher Education Information Management System
HR	Human resource
HRD	Human resource development
IDMS	Infrastructure Delivery Management System
INDLELA	Institute for National Development of Learnerships Employment Skills and Labour Assessments
MPAT	Management Performance Assessment Tool
NC(V)	National Certificate (Vocational)
NDP	National Development Plan
NPC	National Planning Commission
NQF	National Qualifications Framework
NSC	National Senior Certificate
NSDS	National Skills Development Strategy
OCPO	Office of the Chief Procurement Officer
OFO	Organising Framework for Occupations
PALAMA	Public Administration Leadership and Management Academy
PARI	Public Affairs Research Institute
PSC	Public Service Commission
PSETA	Public Service Sector Education and Training Authority
SCM	Supply chain management
SETA	Sector Education and Training Authorities
SIPs	Strategic Integrated Projects
SMS	Senior Management Service
SSP	Sector Skills Plan
StatsSA	Statistics South Africa
TVET	Technical and Vocational Education and Training
WSP	Workplace Skills Plan

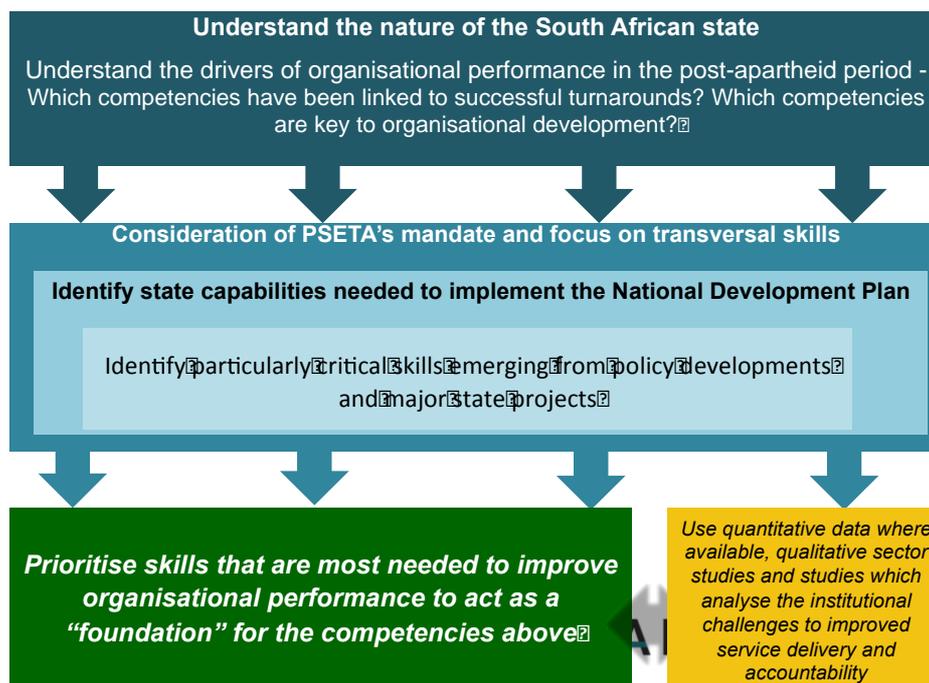
Executive Summary

The Public Service Sector Education and Training Authority (PSETA) is responsible for the development of “transversal” skills across the public service (such as administration, management, policy development and so forth), as well as for skills development in functions undertaken exclusively by the public service (such as diplomacy).

PSETA’s Sector Skills Plan (SSP) builds on the foundations established in the previous two SSPs, in which a clear approach was developed for identifying and prioritising skills and training needs in the public service. This approach has been workshopped with the sector, and was presented and discussed at a recent national skills colloquium hosted by PSETA in March 2015. The approach highlights that skills development priorities cannot be identified simply from an analysis of the scarce skills and competency gaps of individual employees, if we are to develop the state capabilities called for in the National Development Plan. The approach uses organisational performance as the lens to thematise skills needs: a priority skill is one that will make the biggest difference to the performance of the public service.

The SSP draws on primary research on sector specific skills issues, analysis of major government policies and their implications for skills planning, on quantitative analyses of relevant databases (Persal in particular) and on secondary literature. Furthermore, PSETA has undertaken a series of stakeholder engagements and case studies in a small sample of departments to triangulate the findings from the quantitative data analysis and the findings from an engagement with the literature. The identified priority skills were presented to the sector in March this year. PSETA’s approach for identifying its priority skills is summarised in the following figure:

Framework



In summary, PSETA will prioritise development of the following state capabilities (interventions to support any priorities identified in the NDP Chapter 13 will also be considered):

1. Professional and technical competencies, through a focus on support for the Strategic Infrastructure Projects;
2. Development of more operationally inclined and skilled management;
3. Improve technical competencies in Supply Chain Management (SCM), including contract management;
4. Improve competencies in Human Resource Development (HRD) and Management (HRM). With regards to HRD in particular, this will include a focus on improving departments' competencies to provide training through e-learning and improving their competencies to support work integrated learning and bridging into work.

Broadly, these priorities will be supported through the following mechanisms:

1. Work with relevant central government 'champions' of the competencies (the Chief Procurement Officer in the case of procurement, the Department of Public Service and Administration in the case of HRD etc.) to ensure alignment of training across the public service and to more precisely identify the mechanisms through which improved competencies can best be supported;
2. Support training providers (especially public providers) to develop more relevant and improved quality curriculum to address 'demand-supply' mismatches;
3. Use the discretionary grants as a mechanism to encourage departments to pool resources, align their training approaches and support the development of the priority skills outlined above;
4. Facilitate knowledge sharing between departments, academies and other stakeholders;
5. Market the public service as a career of choice to support the recruitment of top graduates and artisans into the public service.

PSETA will use discretionary grants to support proposals for skills development that provide priority skills, that can show some degree of training at scale, at reasonable per capita costs, and which are in line with national approaches to skills development set by the national "champions" of these state capabilities. Departments will be supported to collaborate with other departments to maximize impact and efficiencies. Departments will also be encouraged to co-fund these programmes to improve the chances of senior level departmental support for the programmes. Through the strategic allocation of its discretionary grants and working with departments to build these proposals, PSETA thus aims to support a "change management" process in the skills development sector – moving departments toward a more strategic approach to training.

The SSP proceeds as follows: Chapter One outlines PSETA's scope of coverage, provides a description of key role players and provides an overview of the public service labour market profile. Chapter Two explores the major 'change drivers' impacting on skills demand and supply in the public service and details the national strategies with relevance for skills planning in the public service. Chapter Three provides a detailed analysis of skills demand and supply. Chapter Four outlines PSETA's partnerships in support of skills development. Finally, Chapter Five summarises the findings from the previous chapters, outlines PSETA's priority skills and the plans for supporting these skills.

Chapter 1: Sector Profile

1.1. Introduction

The South African State is the single largest employer in South Africa, now employing a quarter of the working population across national, provincial and local government, and state owned companies (Statistics South Africa, Quarterly Labour Force Survey, 1st Quarter, 2015). It covers a very wide range of sectors, and the nature of demand and supply for labour and skills is shaped by a far more complex set of processes than in the private sector: regional labour market dynamics intersect with policy and political priorities emerging from the executive. Furthermore, long institutional histories of the state shape the nature of organisational competencies. Indicators that can be used as rough proxies of demand and supply of skill in the private sector (such as vacancy rates and the price of labour) do not provide state managers with nearly sufficient information about the nature of scarce and critical skills in their organisations. In this context, developing a strategic approach for guiding the identification and prioritization of skills in the public sector is particularly important.

The following Sector Skills Plan (SSP) builds on the foundations established in the previous two SSPs, in which a clear approach was developed for identifying and prioritising skills and training needs in the public service. This approach has been workshopped with the sector, and was presented and discussed at a recent national skills colloquium hosted by the Public Service Sector Education and Training Authority (PSETA) in March 2015. This approach is intended to guide the work of PSETA, as well as the work of skills development practitioners and senior managers in the public service.

1.2. Scope of coverage

PSETA is responsible for skills development in the public service, that is, at national and provincial level. The Local Government SETA (LGSETA) is responsible for skills development in local government.

PSETA's scope of coverage only includes state employees employed in terms of the Public Service Act of 1994 (i.e. excluding teachers, military personnel and so forth). Many departments, such as education and health, have 'dual reporting'; reporting to PSETA and a 'line-function' SETA, such as the Health and Welfare SETA. For departments for whom there is dual reporting to both PSETA and another line-function SETA, PSETA's work concentrates primarily on skills development amongst the Senior Management Service (SMS)¹ and other "transversal skills" (such as administration).

PSETA is responsible for the development of transversal skills across the public service as well as for skills development in functions undertaken exclusively by the public service (such as diplomacy). Transversal functions include, for example, administration, management,

¹ The SMS refers to all Directors, Chief Directors, Deputy Directors-General and Directors-General in the public service.

planning, legislation and policy development. PSETA therefore includes in its scope the development of skills in areas that overlap with the focus of other line-function SETAs. For example, whilst FASSET (SETA for Finance, Accounting, Management Consulting and other Financial Services) is responsible for skills development in the area of financial management generally, PSETA also has a mandate to develop skills in *public service* financial management.

The table below shows the bodies reporting only to PSETA i.e. not covered by any other SETA.

Table 1: Organisations reporting only to PSETA

Organisations only reporting to PSETA
Economic Development
Government Communication and Information Systems (GCIS)
Higher Education and Training
Home Affairs
International Relations and Cooperation
Labour
National Planning Commission
National School of Government
Planning, Monitoring and Evaluation
Public Enterprises
Public Service and Administration
Public Service Commission
Small Business Development
Trade and Industry
The Presidency
Women, Children and People with Disabilities
All provincial Offices of the Premier
All legislatures

Until fairly recently, state employers in the public service did not have to pay a levy to PSETA. A 2012 policy directive issued by the Department of Public Service and Administration (DPSA) aimed to set more stringent parameters for the spending of training budgets. All departments are required to set aside a minimum of 1% of the total department's annual personnel budget for training and development of its personnel and potential employees, of which 30% is to be paid to the departments' respective SETA. Where a department belongs to more than one SETA, the amount allocated to PSETA is to be proportionate to the number of employees employed under the Public Service Act in that department. However, the directive has yet to come fully into effect. Last year, some departments paid these monies to PSETA. Historically, PSETA has thus received a very small proportion of its income from member departments. In 2014 National Treasury, in consultation with DPSA and the Department of Higher Education and Training (DHET), agreed to fund PSETA discretionary projects through a direct National Treasury allocation. As of 2015/6, PSETA will receive R93 million to fund projects in line with its mandate, rather than depending on government departments paying over skills levies for funding these

projects. This provides PSETA with some certainty on resource allocation for its programmes. However, the budget allocation has been insufficient for PSETA to meaningfully support the development of state capabilities needed to deliver the National Development Plan (NDP). PSETA will have to utilise its limited financial resources in an innovative and strategic way.

1.3. Key role players

Each organ of state (departments and public entities) is responsible for identifying its skills gaps and training requirements. All organs of state submit Workplace Skills Plans (WSPs) to one or more of the SETAs and Human Resource Development (HRD) Plans to the DPSA.

Apart from PSETA and the relevant line-function SETAs, there are a range of other statutory bodies mandated to play a role in skills development for public servants. DHET provides the overall policy framework for skills development, largely articulated in the National Skills Development Strategy III (DHET, undated). It also regulates the SETAs. The Government SETA Forum (GSETA Forum) comprises representatives of PSETA and 11 other SETAs of whom public sector bodies are members, and co-ordinates skills development for government employees. DPSA develops the HRD strategies for the public service and supports and monitors implementation of these strategies. The Public Service Commission (PSC) monitors and evaluates the performance of national and provincial departments, including providing commentary on public service capacity.

Until recently, the Public Administration Leadership and Management Academy (PALAMA), was a national body that provided education and training for public servants. Much of PALAMA's work involved facilitating the provision of training, as much of the training was outsourced to third party providers. PALAMA has been replaced by the National School of Government. The new school intends to provide far more of the training 'in-house' i.e. developing the state's capacity to directly train its public servants.

Some provinces have provincial academies, and a number of departments within the public service also have their own training academies (for example, the Department of Home Affairs (hereafter, Home Affairs) and the Department of International Relations and Cooperation (DIRCO)).

The Human Resource Development Council of South Africa (HRD Council) is a multi-stakeholder body comprising representatives from government, business, civil society, labour and the training and education sector. It was established in 2010 to "create an enabling, coordinated and integrated environment to focus on improving the human resource development base and skills of the South African people" (HRD Council website, 2013).

Lastly, in November 2012, the Council requested the Minister for Public Service and Administration to coordinate an approach to skills development across the public service and local government aimed at the development of a more "capable state" as per the NDP (DPSA, 2013). The forum established to take this forward was the Public Sector Skills Committee (PSSC), which includes representatives from different provider and workplace

constituencies and includes the DHET, DPSA, the GSETA Forum, the National School of Government and the Department of Cooperative Governance and Traditional Affairs (COGTA).

1.4. Economic performance²

Government is the second largest contributor to GDP, behind the finance and business services industry. In the first quarter of 2015, government services contributed 17% to GDP.³ Changes in the contribution made by government therefore affect the economy as a whole. Over the last year (first quarter 2014 to first quarter 2015), the government services sector has grown, with growth averaging approximately 1,6%.⁴

Table 2: Sector contribution to Gross Domestic Product, 2015⁵

Employee	Percent
Finance	22%
Government services	17%
Trade	15%
Manufacturing	13%
Transport and communication	10%
Mining	8%
Personal services	6%
Construction	4%
Utilities	4%
Agriculture	2%
Total	100%

Source: First Quarter, Statistics South Africa (StatsSA), 2015.

Government is a major contributor to employment, employing 2,7 million people (25% of the working population) (StatsSA, Quarterly Labour Force Survey, 2015), with 1.324 million people currently employed in the public service (Persal, May 2015). Overall, the number of people employed in the public service since last year declined by 0,15% (Source: Persal, May 2015) (though it increased in local government – see further details below and details on growth and replacement demand figures in Chapter Two). Government is also important in supporting the growth of the private sector, and thus in employment creation more broadly.

Whilst government has an impact on the functioning of the economy, the state of the economy also has an impact on government; more specifically it has an impact on the size of the budget available to departments to spend on goods and services, personnel budgets and infrastructure. This in turn can have an impact on the resources available for skills development. The National Treasury, concerned with low economic growth and rising

² Given that the form and function of the public service is quite different from that of the private sector, not all of the questions outlined in the DHET's latest SSP Guidelines for Chapter One are relevant to the public service, for example, questions related to the competitiveness of the sector. We deal with the public service's ability to compete *with the private sector for skilled labour* in the appropriate sections of the report.

³ In nominal prices. Source: Statistics South Africa website: <http://www.statssa.gov.za/?p=4669>

⁴ Own calculation from StatSA's quarter by quarter data: <http://www.statssa.gov.za/?p=4669>

⁵ Figures rounded up.

government debt, has over the last couple of years instituted measures to contain and even reduce budget allocations to compensation of employees (i.e. wage bill) and other expenditure items: National Treasury notes that, “Funding for posts that have been vacant for prolonged periods has been targeted; capital project allocations that are projected to underspend have been reduced; and the budgets of the selected non-essential goods and services items are frozen at 2014/15 budget levels.” (National Treasury, 2015: iv-v). As yet, there has been no overall decrease in the size of the wage bill, and no necessary decrease in the allocation of funding to skills development in departments (i.e. 1% of personnel expenditure). National Treasury assumes departments' managements are better placed to decide where savings would least harm service delivery. Whether the managements cut training budgets depends largely on whether there are other areas they can cut easily and the extent to which they see training as a priority (interview with public sector economist Conrad Barberton, Cornerstone Consulting, July 2015). And as we will note further in the report, skills development initiatives do not receive the priority they deserve in many departments. To the extent that PSETA can assess training budgets from Treasury data, PSETA will monitor the effect of budget cuts on skills development over the next few years.

1.5. Labour and market profile⁶

As mentioned, 2.7 million people are employed by the state in South Africa – this includes employment by all levels of government including the legislatures (22% of employment) and state owned enterprises (3% of employment). There has been a slight reduction in the number of personnel employed in the national and provincial government – from 1.326 million last year to 1.324 million this year (source: Persal database, 2014 and 2015).

Note that the Persal database does not include data on legislatures, and on only a handful of the public entities. PSETA is currently undertaking stakeholder engagements with a range of public entities and with legislatures to develop a stronger sense of their skills development needs in relation to those of the public service departments.

Table 3: Formal employment by the public, private and non-profit sectors, 2015

Employee	Number	Percent
A private enterprise	7 989 921	73,3%
A private household	41 006	0,4%
Government controlled business (e.g. Eskom; Telkom)	327 646	3,0%
National, provincial and local government	2 413 848	22,1%
Non-profit organisation	113 013	1,0%
Do not know	19 855	0,2%
Total	10 905 289	100,0%

Source: Quarterly Labour Force Survey, 1st Quarter 2015, Statistics South Africa (StatsSA)

⁶ Given that the form and function of the public service is quite different from that of the private sector, we do not deal with the following questions outlined in the DHET’s SSP guidelines, namely, the number of business in the sector and the location / distribution of such businesses (employer profile). The SSP goes straight into a discussion of the labour market profile.

We now report on profile personnel *employed under the Public Service Act*. This group of personnel comprises all those employed in the public service, except teachers, nurses and medical practitioners, police and military personnel.⁷We report on this category (i.e. “Employed under the Public Service Act”) because personnel such as teachers comprise such a large proportion of the public service (in the case of teachers – 30%) that they dominate the labour market profile of the public service. Remember that PSETA is not responsible for the training of teachers, nurses and so forth.

The number of personnel employed under the Public Service Act is about half a million. The figures per province and for national government are presented in the table below.

Table 4: Number of people employed in the public service under the Public Service Act, 2015

Province / national government	Employees	Per cent
National departments	195 786	36.7%
Kwazulu-Natal	62 940	11.8%
Gauteng	60 062	11.3%
Eastern Cape	52 112	9.8%
Limpopo	37 775	7.1%
Western Cape	33 199	6.2%
Free State	28 860	5.4%
Mpumalanga	27 167	5.1%
North West	24 784	4.6%
Northern Cape	10 993	2.1%
Total	533 678	100%

Source: Persal, May 2015.

Employment data by race and gender in the public service are provided below, showing only those employed under the Public Service Act: more women than men are employed (55%). There have been no significant changes in race, gender and disability statistics since last year’s SSP Update.

Table 5: Employment in the public service under the Public Service Act by gender, 2015

Province / national government	Male	Female
Eastern Cape	42%	58%
Gauteng	44%	56%
Free State	45%	55%
North West	48%	52%
Western Cape	43%	57%
Mpumalanga	36%	64%
Kwazulu-Natal	44%	56%

⁷ Nurses and medical practitioners are employed under the Public Service Act, but the Health SETA focuses on training for this group of personnel. This year we have included security officers who work for the various departments (i.e. *not* military staff or police) in the group, “Employed under the Public Service Act”. This accounts for the very small increase, from last year’s SSP, in the number of personnel recorded as employed under the Public Service Act in the SSP.

Northern Cape	41%	59%
Limpopo	44%	56%
National departments	48%	52%
Total	45%	55%

n = 529 286. Source: Persal, May 2015.

Employment by race varies quite widely across the provincial governments.

Table 6: Employment in the public service under the Public Service Act by race, 2015

National / provincial	African	Asian	Coloured	White
Free State	88%	0%	3%	9%
Kwazulu-Natal	88%	8%	1%	3%
Northern Cape	55%	0%	40%	5%
Limpopo	99%	0%	0%	1%
North West	94%	0%	2%	4%
Eastern Cape	91%	0%	6%	3%
Mpumalanga	97%	0%	0%	3%
Gauteng	90%	1%	3%	6%
Western Cape	25%	1%	63%	12%
National departments	76%	3%	10%	12%
Total	81%	2%	10%	7%

n = 529 286. Source: Persal, May 2015.

One percent of those employed under the Public Service Act have some form of disability (mirroring the wider population).⁸ National government employs a slightly higher proportion of people with disabilities than any of the provinces (1.3%).

As noted in above, PSETA's support for skills development focuses on all occupations in those departments reporting only to PSETA (i.e., those departments that do not also report to a sector SETA such as education or health). In the case of those departments with dual reporting, the focus is primarily on the SMS. As of May 2015, just under 2% of the public service was employed in the SMS – approximately 9 600 personnel. Seventy two per cent of the SMS is black, 6% are Indian, 8% are coloured and 14% are white. Fifty-nine percent of the SMS is male, and 1.2% of the SMS has some form of disability.

The average age of public servants under the Public Service Act is 42 years. There is little difference though in the average age of black and white personnel – these figures are 41 and 47 years respectively.

The average length of service of employees in the public service is 11.7 years (less than a percentage point difference from last year), with 18% having joined the public service less than three years ago. The average length of service of black personnel in the Public Service is 11 years, and for white personnel is 20 years.

⁸ n= 523 985. Source: Persal, May 2015.

Table 7: Years of service for those employed under the Public Service Act, 2015

Years of service	Frequency	Percent
2 Years and less	94 407	17.8%
3 to 5 years	80 532	15.2%
6 to 10 years	140 807	26.6%
11 to 20 years	85 169	16.1%
More than 20 years	128 371	24.3%
Total	529 286	100%

Source: PERSAL, May 2015.

While the public service should ensure a constant stream of new recruits into the public service, staff retention is important to ensure strong institutional memory. By way of international comparison, in New Zealand the average length of service is 9,2 years; in the United Kingdom it is 10 years; and in India the average length of service appears much longer (exact statistics were hard to find).⁹ The South African statistic of 11,7 years is thus average in international comparison. Yet a number of studies have pointed to the poor development of institutional memory in many organisations of the public service – this is not caused by people leaving the public service, but due to high rates of mobility between departments in the public service (see the PSC report, 2008 for example). Average turnover rates in the public service (mobility) computed from the latest PERSAL data shows that turnover was 9% over the 2014 to 2015 period – though with variations between departments and occupations, and this is the rate for turnover for just one year. As we will discuss in Chapter Two, high turnover rates at the senior management level in some departments have had negative consequences for organisational performance – and specifically for enabling mentorship of new and junior recruits to the organisation. We turn now to data on the occupational categories of public service employees.

Note on the classification of occupations in the PERSAL database

PERSAL does not yet capture occupational data per the OFO categories. OFO stands for Organising Framework for Occupations. It is a coded occupational classification system for reporting and monitoring skills demand and supply in the South African labour market, and for coordinating the development of occupational qualifications. Appendix One provides the description of the ‘Major Occupational’ categories (i.e. the occupational categories used by PERSAL).

At an aggregate level (major occupational category) mapping the PERSAL categories to the OFO ‘major groups’ can be very crudely done (see Appendix One). Mapping the old categories still used in PERSAL to the OFO system at a detailed level is a major undertaking requiring a dedicated budget and team that includes relevant expertise from PERSAL.

The first table below shows data for the *whole PERSAL database* (i.e. also including those not employed under the Public Service Act). School educators make up nearly a third of those employed in these two spheres of government.

⁹ New Zealand, source:: <https://www.ssc.govt.nz/hrc-survey-2013>); United Kingdom: <http://www.guardianpublic.co.uk/workplace-reform-leadership>); India: http://darpg.gov.in/darpgwebsite/cms/document/file/civil_services_survey_2010.pdf

Table 8: Public service employment by Persal Major Occupational Category, 2015

Major occupational category	Number of employees	Percent
Educators	395 969	31,8%
Professionals and managers	225 597	18,1%
Administrative office workers	177 108	14,2%
National security and custodian personnel	139 405	11,2%
Elementary occupations	128 924	10,3%
Social natural technical and medical sciences and support	83 354	6,7%
Service workers	51 635	4,1%
All other occupations	15 180	1,2%
Technicians and associated professionals	11 127	0,9%
Craft and related trades workers	8 501	0,7%
Drivers, operators and ships crew	7 127	0,6%
Information technology personnel	2 210	0,2%
Total	1 246 137	100%

Source: Persal, May 2015.

The next table shows data only for employees *under the Public Service Act*. Administrative office workers make up a third of the public servants employed under the Public Service Act, and professionals and managers account for 22% (remember that 2% of the half a million public servants under the Public Service Act are employed in the SMS).¹⁰

Table 9: Public service employment by Persal Major Occupational Category, for Public Servants employed under the Public Service Act, 2015

Major occupational category	Frequency	Percent
Administrative office workers	177 108	33.2%
Elementary occupations	128 924	24.2%
Professionals and managers	116 232	21.8%
Service workers	51 635	9.7%
Social natural technical and medical sciences and support	17 740	3.3%
All other occupations	15 180	2.8%
Craft and related trades workers	8 501	1.6%
Technicians and associated professionals	7 283	1.4%
Drivers, operators and ships crew	7 127	1.3%
Information technology personnel	2 210	.4%
National security and custodian personnel	1 738	.3%
Total	533 678	100%

Source: Persal, May 2015.

¹⁰ The increase in the percentage of service workers relative to other occupations since last year (from 3% to 9%) is accounted for by the inclusion of security personnel (not military or police) into the category “Employed under the Public Service Act”. Last year this group was omitted from this category.

Occupation statistics are shown by race below. A higher proportion of white people are represented in the 'Craft and related trades workers' category (artisans) than in other major occupational categories. This is most likely as a result of the legacy of job reservation laws under apartheid. There is also a remaining higher proportion of white people in the category 'Professionals and managers': whilst over a third of white personnel and third of Indian personnel under the Public Service Act are in the category 'Professionals and managers', the percentage for African and Coloured personnel is far lower at 21% and 18% respectively. A closer look at the category shows that this is primarily accounted for by underrepresentation of black personnel in the *professions*, rather than in management.

Table 10: Persal major occupational category by race for the public service, 2015

Major occupational category	African	Asian	Coloured	White
Administrative office workers	32%	42%	35%	40%
Elementary occupations	26%	8%	25%	5%
Professionals and managers	21%	32%	18%	36%
Service workers	9%	10%	13%	10%
Social natural technical and medical sciences and support	4%	2%	3%	1%
All other occupations	3%	0%	1%	1%
Drivers, operators and ships crew	1%	1%	1%	0%
Craft and related trades workers	1%	2%	1%	3%
Technicians and associated professionals	1%	1%	1%	2%
Information technology personnel	0%	1%	1%	1%
National security and custodian personnel	0%	0%	0%	1%
Total	100%	100%	100%	100%

Source: Persal, May 2015.

There is a higher proportion of women than men in the category 'Professionals and managers' (55% versus 45% respectively). However, many of the broad occupational categories still reflect the gendered division of labour. The very large majority of personnel in the categories, 'Drivers', and 'Craft and related trades workers' are male. There are more women in the category, 'Social, natural, technical and medical science personnel' and more women (68%) in the category 'Administrative office workers'.¹¹

There is a substantially higher proportion of disabled personnel employed in the category 'administrative office workers' than those who do not have some form of disability, and a slightly higher proportion of disabled personnel in the category, 'professionals and managers'. A slightly lower proportion of disabled personnel are employed in all other occupations, and a far lower proportion in the category, 'Elementary occupations' – many of the jobs in this category involve manual labour.¹²

PSETA focuses primarily on support to develop capacity in transversal skills, such as administration, management, planning, legislation and policy development and so forth.

¹¹ n = 529 286. Source: Persal May 2015.

¹² n = 529 286. Source: Persal May 2015.

Therefore most of its ‘target’ employees are those in the categories ‘Professionals and managers’ and ‘Administrative office workers’. The 2015 Persal statistics show that PSETA’s constituent employees, i.e. all personnel in departments reporting only to PSETA and personnel in administrative and managerial occupations in SETA with dual reporting, constitute about 280 000 people, 62% who are in the category ‘Administrative office workers’, and 33% who are in the category ‘Professionals and managers’. (Note: This later occupational category is far wider than the Major OFO category ‘Clerical support workers’. ‘Administrative office workers’ include administrative personnel such as secretaries, filing clerks, database operators, as well as personnel undertaking more senior tasks – including the formulation of policies, regulations and procedures of an administrative nature, as well as including diplomats. It therefore includes personnel who are classified in the Major OFO categories ‘Managers’, ‘Professionals’ and ‘Technicians and Associate Professionals’.)

The accuracy of Persal data on the qualifications of current public servants is not reliable. For this reason we draw on Statistics South Africa (StatsSA)’s Quarterly Labour Force survey. Unfortunately the survey data does not distinguish between local, provincial and national government. Results are shown below. Nineteen percent of people employed in the public sector (excluding state owned enterprises) have a higher education degree. Twenty-six percent do not have Grade 12. Given the data constraints, we are not able to link the qualification levels to the kinds of occupations or job profiles personnel occupy in the public service. We discuss the issue of appropriate skilling for the public service further in Chapter Three of this SSP.

Table 11: Qualification levels of personnel employed in local, provincial and national government, 2015

Qualification level	Number of employees	Percent
Primary school and less	204 234	8%
Grade 9 and below	139 684	6%
Less than Grade 12	278 776	12%
Grade 12	722 986	30%
Certificate/diploma	593 499	25%
Certificate/diploma without grade 12	20 628	1%
Bachelors	290 856	12%
Honours	103 781	4%
Master and above	42 712	2%
Do not know	14 576	1%
Other	2 117	0%
Total	2 413 848	100%

Source: StatsSA, Quarterly Labour Force Survey, 1st Quarter 2015.

In conclusion, PSETA is responsible for skills development in national and provincial government, with a focus on the development of transversal skills. The sector profile outlined in the chapter above shows that PSETA’s work covers a very broad range of sectors, from skills development of public financial managers in DIRCO, to the development of policy analysis skills in the Department of Water Affairs. This broad scope of coverage therefore requires a very careful, strategic response from PSETA in order to optimise its contribution to skills development.

Chapter 2: Key Skills Issues

2.1. Introduction

The following chapter explores the major factors impacting on skills demand and supply in the public service. It then details the national strategies with relevance for skills planning in the public service.

2.2. Change drivers

Broadly, the major factors impacting on skills demand (number and type of skills demanded) in the South African public service are:

- Changes in the size of the public service due to changes in the size of the population, the rate of retirement of public servants from the administration (replacement demand) and so forth;
- New policy directions and priorities initiated by government can have an impact on the number of people employed and the skills demanded in the public service;
- The organisation of the state and the service delivery models through which the state chooses to deliver services and structure its operations will have implications for which kinds of capacities the state needs to develop;
- Changes in the nature of politics as it affects the organisation and staffing of departments;
- Finally, the capacity of HR (Human Resource) and HRD units in the public service will shape the extent to which skills needs and gaps are appropriately identified. Improvements or a decline in this capacity will affect the nature of skills demanded. The capacity of HR and HRD units is especially important in the case of the public service (as opposed to the private sector): the public service cannot rely on 'price signalling' mechanisms to indicate the need for changes in its business operating models or skills profile of its workforce to the same extent that the private sector can.

Broadly speaking, changes in the supply of skills to the public service are affected by:

- Changes in the formal education landscape (changes in Higher Education and other post-schooling institutions and curricula for example) including improvements or a decline in the quality of training and education provided in qualifications relevant to the public service;
- Shifting perceptions and preferences of those entering the formal education system and the labour market (for example, which courses and occupations are more attractive to learners and employees?) – this includes perceptions of the advantages and disadvantages of working in particular positions in the public service. Currently, the public service is not effectively competing with the private sector for the best graduates and skilled personnel (in the professions and management positions);
- Changes in the criteria for entry into positions into the public service and wider recruitment and retention strategies in the public service;
- Broad labour market dynamics: changes in the demand and supply for labour in the wider labour market will also tend to affect the supply of skills to the state.

The nature of the ‘demand drivers’ just outlined means that good skills planning for the public service requires an understanding of the institutional context in which departments operate. We provide a very schematic outline of some of this context in the section below. Before doing this, we provide a brief description of growth and replacement demand in the public service – growth demand refers to new appointments to the public service i.e. new personnel demanded over and above those needed for replacing existing staff that leave the public service; and replacement demand refers to the demand for new capacity created by staff exiting the public service. The purpose of estimating these figures is to provide the broad parameters for planning and budgeting for the number of people that will have to be skilled and recruited over a given period.

As noted in Chapter One, the number of employees employed in the Public service (national and provincial government) has decreased very slightly over the last three years (i.e. the years for which PSETA has been analysing Persal data). There was also a slight decrease in personnel employed under the Public Service Act for the last two years running.

Table 12: Change in number of people employed in the Public Service, 2012 to 2015

Year	Number of employees	Percentage change per annum
2012	1 331 729	-
2013	1 331 154	-0,04%
2014	1 326 320	-0,36%
2015	1 324 228	-0,15%
<i>Change from 2012 to 2015</i>	<i>Decrease of 7501 personnel</i>	<i>-0,5%</i>

Source: Persal, 2012 to 2015.

Vacancy rates are presented and explored in Chapter Three: theoretically, should these vacancies be filled, they would see an increase in the size of the public service. The mean vacancy rate for the public service calculated from Persal data sits at 11,4%. However, not all vacancies are necessarily vacancies that departments wish to fill: changes in departmental organograms are not always reflected immediately in the Persal database (i.e. some vacancies are posts no longer needed). (The DPSA issued a Directive in June this year reminding departments that the Medium Term Expenditure Framework 2014-2019 commits departments to keep their vacancy rates to no more than 10%).

The drivers of replacement demand include the retirement of existing public servants, attrition of staff due to illnesses and death, emigration, dismissals, and staff resigning to take up positions outside the public service. Over the 2014 to 2015 period, the total replacement demand for the whole of the public service (i.e. including teachers), was 5,5% of the Public Service (calculated from Persal, 2015). Unfortunately we do not have this data specifically for those personnel employed under the Public Service Act only – this figure and the figures in the table below are for the whole of national and provincial government. Whilst replacement demand is not especially high, those who leave may take with them valuable expertise and institutional memory. As we have mentioned, institutional memory can also be lost through high turnover of staff from one sector or department in the public service to another.

Table 13: Reasons for officials leaving the Public service over the 2014 to 2015 period

Reason for leaving	Percent of total exits
Resignation (including resignation due to ill-health)	52,7%
Retirement	30,4%
Deceased	7,7%
Contract expired and not renewed	3,0%
Other	2,5%
Dismissal or resignation with criminal charges	1,8%
Discharged for Ill-health	0,9%
Change in nature of post, privatisation etc	0,4%
Transfer to another state institution	0,3%
Left without notice	0,2%
Total	100%

Source: PERSAL, May 2015.

The figures above highlight the importance of retention and recruitment strategies, and of succession planning. Whilst there is a 'Career Planning and Management Policy' for the public service – the National Planning Commission (NPC) has pointed to the need for far greater attention to succession planning and career development (NPC, 2012). This in turn is facilitated by stable senior management, amongst other factors.

Growth and replacement demand projections can also be affected by changes in policy. We explore relevant policies in South Africa in the following section, Alignment with national strategies and plans. Internationally, changes in the size of the public service will also be affected by increases or decreases in the fiscus; and over the long term by changes in the population (the workforce in general has expanded with the expanding population); in the medium term it may be affected by changes in the models of public administration and changes in the way a ruling party sees the role of the state. For example, as a result of the adoption of New Public Management (NPM) and the consequent outsourcing and privatisation of certain government services, the proportion of people employed in government in the United Kingdom in 2013 was at its lowest in forty years (Cribb et al, 2014). These changes are not simply as a result of technocratic decisions, but are affected by political and normative ideas about the appropriate role of the state in society – this affects the size and organisation of the public service and thus the nature of the skills the state demands, develops or weakens.

In the late 1990s South Africa too adopted NPM as the model of public administration. The first set of changes under NPM were made in the late 1990s, and then further changes from about 2003, primarily in the implementation of a decentralised model of state procurement. NPM has involved a number of changes to the structure and operations of the state, in addition to the major changes made in the transition from apartheid to democracy. In this regard, in 1994 the democratic government in South Africa inherited a public sector suffering from decades of under-investment and deliberate neglect of systems in many parts of the state that had been responsible for providing services to black South Africans. Yet the legacy of administrative and operational weakness in government departments was not always adequately understood and catered for in the post-apartheid period when new models of service delivery were introduced. The Public Service Act of 1994 formally unified

the separate administrations of the homelands and 'Own Affairs' departments into a unified government administration. In the first two years of the African National Congress's first term of office it focused on the task of integration, (Kuye, 2006: 294-295) designing new administrative models, developing policies, incorporating staff, processes and systems. The pace of change in government organisations was extremely rapid, and in many instances organisations were set up from scratch. This was done at the same time as government was beginning to rapidly expand the provision of services to black South Africans. Stable and effective operational routines often did not have time to establish in this context.

Much of the hope for establishing new operational routines and systems was placed on the newly established SMS. The SMS has grown from an initial staff component of about 1 500 people in the late 1990s to just over 9 000 today. In relation to twenty years ago, departmental managers now need a wider set of competencies – they are not only expected to implement decisions made by central government departments, but to develop policy and systems for service delivery. However, when it comes to service delivery or the implementation of plans and strategies, many departments are found wanting (see the National Planning Commission's Diagnostic for example, 2011). Often basic operational and administrative processes are poor, and/or not well designed in relation to the mandated outcomes, whatever the specific area. The SMS has also struggled to fill key positions and to retain its staff (PSC, 2011; Chipkin, 2011). The reasons for this are complex, but in some departments it has impacted on organisations' capacity to train and develop operational and technical skill.

This brief background history has been provided to underscore the following point with relevance for skills planning in the public service: skills are developed (or the development of skills is constrained) within a broader organisational and institutional context.

Despite the challenges outlined above, a number of departments in the public service are well functioning organisations able to deliver on their organisational mandate and staffed by personnel who have a strong professional ethos. Recent studies of the turn-around strategy in Home Affairs have highlighted how successes of the department have come through stabilising the management echelon. Further, attention was also paid to the administrative and managerial challenges of service delivery, and developing effective training in this regard (Mkhize, 2011). What drove institutional performance, in other words, was a management cadre focused on operational and administrative details.

Strong technical and strategic expertise in contract management and other supply chain management (SCM) functions was also developed. A recent report by the Public Affairs Research Institute (PARI) notes that, "Service delivery in South Africa is decreasingly performed directly by government administrations and increasingly performed by private companies which tender for this role. The role of public servants has changed from that of administration to that of managing contracts." (Brunette et al, 2014). National Treasury data shows that 42% of the South African government's budget is now spent through procurement (a figure which is relatively high by international standards) (Brunette et al, 2014). Effective and transparent SCM has been fundamental to service delivery given the current model of public administration.

Improved departmental performance has also been linked to the strategic positioning of HR and HRD. Strong, and senior placed, HR and HRD capacity supports the appropriate identification of skills and skills development initiatives in departments (PSETA, 2013).

What this research outlined above suggests is that the identification of priority skills and training needs should thus be shaped by an analysis of the major drivers/inhibitors of public sector organisations' performance in South Africa. Departmental performance or lack of performance is shaped by many factors – skills issues are only one factor. However, skills development for the public service cannot simply be driven by aggregating data from individual civil servants Personnel Development Plans (PDPs) and WSPs. Skills development must be driven strategically. This is the approach that PSETA has adopted in the last three SSPs. We present PSETA's strategic framework for identifying priority skills in Chapter Five. This approach has been endorsed by its stakeholders at a number of stakeholder engagements in 2013 and 2014, and at a national colloquium on skills development held earlier this year.

2.3. Alignment with national strategies and plans

A wide range of public sector plans and strategy documents have commented on the need to substantially improve the skills of public servants and the general capacity of the South African state (NPC, 2011; NPC, 2012; DPSA, 2013; HRD Council, 2014 for example). The NDP calls for the building of a “capable state” – underpinned by “effectively coordinated state institutions with skilled public servants who are committed to the public good and capable of delivering consistently high-quality services, while prioritising the nation’s developmental objectives” (NDP, 2012). Within the 12 ‘Outcomes Framework’ identified by government and monitored by the Department of Performance Monitoring and Evaluation (DPME) relevant outcomes include Outcome 5: ‘A skilled and capable workforce to support an inclusive growth path’, and Outcome 12A: ‘An efficient, effective and development oriented public service’. Commitment 7 of the Human Resources Development Strategy is “ensuring that the public sector has the capability to meet the strategic priorities of the South African Developmental State” (HRD Council, 2009) – reiterated in the National Skills Development Strategy III (DHET, undated). The PSSC has integrated Ministerial Outcomes 5 and 12 as the goal for the PSSC work, i.e. developing the “skilled and capable workforce required to achieve a more efficient, effective, professional and development-oriented state.” (DPSA, 2013).

With regards to state policies especially relevant to PSETA’s work, the roll-out of the Strategic Integrated Projects (SIPs) under the state’s programme to improve and expand state’s physical infrastructure is particularly important. The public infrastructure delivery environment in South Africa has gone through major changes in the last two years. Improved infrastructure delivery has become a major item on government’s agenda. The 2012 Medium Term Budget Policy Statement includes the following fiscal policy objectives, “Improving the impact of spending by shifting the balance of resource allocation towards investment in infrastructure”. Under the NDP, government aims to increase public infrastructure investment to reach 10 per cent of Gross Domestic Product. The National Infrastructure Plan (NIP) was launched in 2012 making provision for 18 SIPs, which are thematic or regional clusters of construction projects. The Presidential Infrastructure

Coordinating Committee was established to provide strategic guidance to the implementation of the NIP. We explore the relevant skills required to support this programme in Chapter Three, and provide recommendations for PSETA's support in this regard in Chapter Five.

The National Skills Accord, signed in 2011, is an agreement between labour, business, and government. The aim of the Accord is to expand skills for economic growth and to contribute to creating 5 million jobs by 2020 in line with New Growth Path targets. The Accord commits the public sector to increasing its intake and training of artisans – primarily through state owned enterprises. PSETA is mandated to play a supporting role in improving the development of artisan skills.

There are now various policies that commit South Africa to transition to a 'green economy'; see for example the New Growth Path, see also the NDP. The National Planning Commission mentions many competencies that will need to be developed to support the NDP. Recall that PSETA's focus is primarily on transversal skills: PSETA has identified a group of core 'transversal' competencies that we suggest should be the bedrock of developing more capable organisations in support of the Plan and other national priorities. These are outlined in more detail in Chapter Five.

In March this year, the HRD Council published the 'National Integrated Human Resource Development Plan 2014-2018' (HRD Council, 2014). The Plan outlines a set of high-level goals, focus areas and indicators for developing human resources in South Africa. The goal most relevant to PSETA's work is "A Capable Public Sector with Effective and Efficient Planning and Implementation Capabilities." (HRD Council, 2014). The NIRDP identifies two focus areas for meeting this goal: 1) "Revise the public service Human Resource Development (HRD) strategies and plans in line with the vision of the NDP for a professional and capable public service." (HRD Council, 2014: 38). 2) "Turn the public sector into a training space." Here the envisioned focus is on developing departments' and public entities' ability to take on young graduates and those in technical and vocational training in order to provide workplace based training. (HRD Council, 2014: 38).¹³ The DPSA is identified as the 'lead' department for implementing these goals, with support to be provided by PSETA and a range of other institutions.

In "opening up the public sector to act as a training space", the public sector becomes a mechanism for capacity building rather than being the direct target of interventions to improve capacity. PSETA notes that a clearer articulation of the mechanisms for improving departments' abilities to act as a training space is needed. The following SSP provides some recommendations, as well as providing recommendations on how to "professionalise the public service". This observation has also shaped PSETA's identification of priority skills in Chapter Five.

¹³ Rationale provided for this focus: "there is a need to create & open up public sector workplaces for placement of especially TVET and university of technology students & graduates so that they can get workplace experience." (Human Resource Development Council of South Africa, 2014: 38).

Chapter 3: Extent of skills mismatches

3.1. Introduction

The following chapter focuses on the demand for different skills and categories of occupations in the public service (i.e. skills demand) and on identifying the areas in which training of existing public servants is most required; the supply of skills to the sector; and provides an analysis of scarce skills and skills gaps. Important notes on data sources for this chapter are included in Appendix Two of this SSP.

3.2. Extent and nature of demand

We turn first to occupations in which Persal data suggests there are vacancies, and then triangulate and further explore vacancies and the nature of skills demanded in the public service through sector specific studies (drawing on secondary literature and research undertaken by PSETA for the SSP).

The mean vacancy rate for the public service calculated from Persal data is 11,4%, up by 1.4% from last year's calculations. Excluding teachers, nurses, other medical practitioners and police, the vacancy rate is 13,2%. Persal data shows that the mean vacancy rate *in the SMS* is higher than this, at 16% (as it was last year).

We now present data on vacancy rates and numbers per broad occupational category (see Appendix One for definitions). Vacancy rates calculated from Persal are highest in the category "Craft and related trades workers" (this category includes artisans), followed by the category "Information technology personnel". The vacancy rates in both of these broad occupational categories have decrease by a few percentage points since last year (3% and 4% respectively). There has been less than a percentage point change in the vacancy rate for "Professionals and managers" and "Administrative office workers" since last year.

In terms of the *absolute number of vacancies* per broad occupational category, the vacancies are highest in "professionals and managers", and "educators", followed by "administrative office workers" and "elementary occupations".

Table 14: Vacancy rates and numbers in the public service per Persal Major Occupational Category, 2015

Persal major Occupational Category	Vacancies	Vacancy rate
Educators	43 065	9,81%
Professionals and managers	41 725	15,61%
Administrative office workers	23 681	11,79%
Elementary occupations	22 162	14,67%
Social, natural technical and medical sciences and support	12 203	12,77%
National security and custodian personnel	7 643	5,20%
Service workers	5 207	9,16%

Technicians and associated professionals	2 311	17,20%
Craft and related trades workers	1 884	18,14%
Drivers, operators and ship's crew	1 376	16,18%
Information technology personnel	468	17,48%
All other occupations	227	1,47%

Source: Persal, May 2015.

Note that the categories “Professionals and managers”, “administrative office workers” are both very broad. A closer look at the data on vacancy rates (by Persal unit occupational category – i.e the most refined occupational category recorded in Persal) shows that vacancy rates are generally highest in the technical and professional occupations which require either specialist training in higher education institutions (in the case of the professions) or training in colleges and appropriate artisanship (in the case of artisans and other technical occupations). The NPC mentions acute shortages of technical skills within departments and a reliance on outsourcing for professional and technical services (NPC, 2011 and NPC, 2012). Vacancy rates are also high in elementary occupations.¹⁴

Vacancies are highest in terms of *absolute numbers* in the administrative clerical and elementary occupations (note that there are more posts for administrative/clerical and elementary staff than other categories).

Table 15: Vacancy rates and numbers in the public service per Persal Unit Occupational Category, for those employed under the Public Service Act¹⁵, 2015 – showing vacancies of more than 5% or more than 10 personnel

Persal major Occupational Category	Vacancies	Vacancy rate	Persal major Occupational Category	Vacancies	Vacancy rate
Basic training	44	86%	Secretaries and other	2270	15%
Compositors type-set	34	43%	Crime investigators	35	15%
Environmental health	489	35%	Trade labourers	1350	15%
Youth workers	225	34%	All artisans in build	944	15%
Mechanical engineering	22	33%	Household and laundry	2238	15%
Attorneys	127	32%	Meteorologists static	75	15%
Security guards	3458	32%	Agricultural animal	241	14%
Artisan project and	411	29%	Horticulturists fore	413	14%
Binding and related	22	27%	Language practitioner	245	14%
Road trade workers	112	27%	Veterinarians	47	14%
Computer program	28	26%	Housekeepers laundry	128	14%
Print.management	16	25%	Boiler and related o	48	14%
Motor vehicle driver	394	25%	Architects town and	58	14%
Engineers and relate	468	25%	Motorised farm and f	44	14%
Magistrates	660	25%	Logistical support p	631	14%

¹⁴ The high vacancies in the elementary occupations are primarily in the occupations of basic security personnel and cleaners. Whether these reflect actual vacancies or departments choosing to outsource these services, is not clear.

¹⁵ I.e. excluding teachers, police, nurses and other medical professionals.

Road workers	1840	25%	Farm hands and labour	547	14%
Librarians and related	180	25%	General legal administrator	399	13%
Risk management & security	136	24%	Building and other p	964	13%
Medical technicians/	154	23%	Social work and related	1792	13%
Head of department/c	61	23%	Archivists curators	35	13%
Geologists geophysics	62	23%	Mess portrs & delive	1221	13%
Civil engineering te	159	23%	Computer system des.	74	13%
Inspectors of appren	293	22%	Cashiers tellers and	25	13%
Water plant and rela	74	21%	Road superintendents	25	13%
Quantity surveyors &	45	21%	Financial clerks and	1780	12%
Judges	122	20%	Food services and wa	920	12%
Aircraft pilots & re	12	20%	Forestry labourers	171	12%
Farming forestry adv	55	20%	Material-recording a	1113	12%
Physiotherapy	332	20%	Medical research and	20	12%
Educationists	113	20%	Library mail and rel	717	12%
Advocates	155	19%	Cleaners in offices	9366	12%
Mining geology & geo	10	19%	Composers musicians	29	12%
Other machine operat	49	19%	Biologists botanists	16	12%
Suppl.diagno.radiogr	34	19%	Trade/industry advis	125	12%
Senior managers	1883	19%	Auxiliary and rel wo	2134	12%
Diplomats	100	19%	Client information c	447	11%
Other information te	366	18%	Other administrative	12073	11%
Print.& rel mach ope	51	18%	Human resources cler	1862	11%
Psychologists and vo	260	18%	Community development	431	11%
Biochemistry pharmac	277	17%	Statisticians and re	114	11%
Nature conservation	95	17%	Prosecutor	343	10%
Ambulance and relate	2376	17%	Conservation labourer	87	10%
Middle managers	10243	17%	Bus and heavy vehicl	198	10%
Electrical and elect	30	16%	Chemists	181	10%
Veterinary assistant	11	16%	Safety health and qu	172	10%
Other admin policy	2273	16%	Regulatory inspector	795	9%
Physicists	14	16%	Translators and air	215	9%
Financial and relate	1181	15%	Cartographic surveyi	18	8%
Chemical and physica	17	15%	Food services worker	81	8%
Human resources & or	989	15%	Chaplain and related	17	7%
Economists	70	15%	Security officers	2615	6%
Light vehicle driver	505	15%	Appraisers-valuers a	155	6%

Source: PERSAL, May 2015.

Vacancy rates calculated from current PERSAL data at a detailed level suggest that vacancies are high across a very wide range of skills: how do we identify priority scarce skills within this context? As trite as the observation is, it is worth noting that even if vacancy rates or

vacancy numbers are equally high across a number of different occupations, these occupations do not necessarily require equal attention: a shortage of managers will have a far greater impact on service delivery than, say, office cleaners. We will therefore now look at what a range of other studies have suggested about scarce skills in the public service.

In May last year, the DHET published a list of “top 100 occupations in demand” in the South African economy (DHET, 2014). The list was developed based on a literature review of qualitative studies and quantitative studies, policy documents such as the NDP, the Industrial Policy Action Plan and the New Growth Path, as well as data from SETA sector skills analysis.¹⁶ The list includes management skills in specific areas (Municipal Managers, Human Resource Management, Operations Management, Health and Safety, General Managers); medical practitioners are also mentioned, as are project managers in IT and construction, and teachers in maths and science. Engineers, technicians and artisans, however, dominate the list.

Persal data shows that vacancy rates for engineers in the public service sit at 26% (and higher for specific engineering occupations). National Treasury personnel (August 2013) suggest that there is a shortage of supply of electrical engineers – skills also include in the Top 100 list.

Vacancy rates in the engineering profession are not always created by an absolute scarcity of skill – recruitment of engineers to the departments based outside the major metropolitan areas presents a particular challenge.

A recent report on the water and sanitation sector in South Africa notes the shortage of technical skills outside the urban centres as a challenge for delivery (Morgan et al, 2014). However, the report highlights that the primary shortage in this sector does not lie in engineering occupations, but in the artisan and trades related occupations - such as millwrights, sewage works operators, plumbers and so forth (Morgan et al, 2014). The study shows that despite the need for these skills, personnel budget allocations (in terms of salaries and in terms of number of posts) have privileged senior managers over trades related occupations, deepening the problem of recruiting and training artisans and technical personnel (Morgan et al, 2014).

The increase in infrastructure development as a result of the funding provided for SIPs requires more built environment specialists, infrastructure procurement and infrastructure managers than currently employed in the public service (interviews with National Treasury, August 2013). The Construction Education and Training Sector Authority (CETA) SSP (2014) highlights that the demand for all skills across the construction sector will increase with the roll out of SIPs. The DHET’s draft list of Top 100 occupations in demand (2014) in the country as a whole includes quantity surveyors, construction project managers, and land surveyors. In the built environment sector, urban planners are also mentioned as scarce skills.

¹⁶ Depending on where the skill was listed as scarce, how many times and so forth, it was weighted using a specified methodology.

Many reports, including the NPC's Diagnostic (2011), refer to weakness in the management capacity in the public service. The shortage of skills in management is not so much in the lack of supply of personnel with degrees in public administration, public management, business management and so on. Rather, it is the competency and skill of personnel employed in many senior management positions in the public service that is of concern (we return to this point in the section of this chapter entitled, Identification of scarce skills and skills gaps).

Effective management requires a range of supporting functions – strong basic administrative capacity for example. Studies have pointed to weaknesses in administrative functions such as record keeping (Technical Assistance Unit, 2012). Research by PARI (Yuba, 2013) has identified archivists and record keeping as occupations in which there is an absolute scarcity of skills. However, the research also found that the recruitment of archivists and related professionals has also been affected by cutbacks in funding to these positions and by a lack of prioritisation of this kind of skill in many government departments.

Vacancy rates for finance related occupations sit amongst the lowest according to the Persal database. However, research into vacancy rates in 2010 by the National Treasury suggested that, “vacancy rates for staff in the public sector averaged 31 per cent for finance positions, 36 per cent for SCM, 39 per cent for internal audit and 44 per cent for risk management” (National Treasury 2010).¹⁷ The DPSA has noted that contract management of procurement in the public service is a competency that is essential for improved infrastructure delivery and management and a core competency of the administration that needs to be further developed.¹⁸

According to the Persal data, vacancies in the occupations classified as HR sit at 14% - amongst the lowest across occupations, though arguably too high given the importance of the HR function in departments. However, the need for South Africa to develop more specialist human resource managers for the broader economy is now being acknowledged. Human Resource Managers are included in the DHET's draft list of top 100 occupations in demand in the South African economy (DHET, 2014). With respect to the public service, a PSSC report notes that, “There are mixed views about whether there are enough funded and filled HR posts in the public sector...”, though note though that, “The public service represents 15% of all formal employment in SA, but only about 8% of all HR professionals...” (DPSA, 2013). Whilst vacancies in HR and HRD are not especially low, there is a shortage of personnel in HR and HRD specifically qualified for these positions. The 2011 PSC Assessment of HRD Practices in the Public service noted the lack of capacity in HRD (PSC, 2011).

¹⁷ The discrepancy between the Persal figures and National Treasury figures is not clear – this may be partly accounted for by differences between Persal categories for finance related occupations and the ones used by Treasury.

¹⁸ Submission by Director: HRD Strategy and Policy – DPSA. The submission references two key reports, namely the ‘Report on the Skills Dimension to the National Infrastructure Plan’ and the ‘Report for the DPSA on Skills Planning for SIPs implementation’.

3.3. Extent and nature of supply

In the next section we focus on the supply of skills to the public service and on the training providers and forms of training available to the public service. We assess the extent to which the supply of labour and training meets the needs of the public service.

Given the diversity of the functions performed by the public service, the appropriate qualifications for public servants (where formal qualifications are needed) can potentially span the full spectrum of the post-school education and training system. Training outside of the formal qualifications system for public servants includes workplace training in the form of coaching or mentoring, internships, in-service training by public sector academies, training offered previously by PALAMA and now the National School of Government, provincial government and other state academies, and other public and private training providers. Public servants can obtain Adult Basic Education and Training certificates via a range of providers. E-learning¹⁹ is now being introduced in the public service (albeit slowly) as a medium for some forms of training (we provide further detail below).

3.3.1. Skills formation through the formal education system

The number of people obtaining a National Senior Certificate (NSC) (Matric) and the achievement levels of those who pass matters then for both for the supply of people to the further and higher education sectors, and for the direct supply of labour for the public service in occupations which do not require post-school qualifications. Currently 44% of staff employed by the state have some form of post-Matric qualification.

The qualification levels that departments require of their staff vary from department to department, depending on their mandate. The DTI, for example, requires the majority of its personnel to have degrees or diplomas (interviews with DTI, August 2013), whereas this is not necessary in Home Affairs (interviews with Home Affairs, August 2013). However, senior officials responsible for HRD in Home Affairs state that they are increasingly hiring staff with higher education qualifications in posts historically not requiring these qualifications (staff with degrees and diplomas are assumed to be more autonomous, better prepared to use their discretion appropriately etc.).

We turn first to a brief look at the statistics on matric numbers and passes, and then to graduates from higher education.

Enrolment in school education up to the end of compulsory school going age is near 100% in South Africa, and the majority of learners receive a Grade 9 education.²⁰ However, school drop-out after Grade 9 is high (Meny-Gibert, 2012). The NSC results from 2013 (the most recent publically available figures) show that seventy eight percent of the candidates who sat for the NSC examination passed (439 764 people – an increase of approximately 62 000

¹⁹ The provision of training and other forms of education through technologies such as television, computers and so forth.

²⁰ Grades R to 9 constitute the 'basic education' phase of schooling and enrolment up to Grade 9 is compulsory.

from last year). Thirty nine percent of those who passed qualified for entry into a degree programme at a university (171 755) (Department of Basic Education, 2015).²¹ Over the last five years there has been a slight upward trend in the number of candidates obtaining sufficient credits for entry into a bachelor degree.

Fifty seven per cent of the NSC candidates wrote the Maths exam. Of these, 78 677 (24%) passed with a pass of 40% or more – a slightly lower number than last year. There is now a wealth of research²² on the poor levels of numeracy, mathematical achievement and literacy of South African school leavers, affecting the ability of school leavers to master certain elementary tasks in the workplace and to qualify for, and complete, Technical and Vocational Education and Training (TVET) and higher education qualifications (especially in professional and technical occupations).

There are differing opinions locally and internationally about the appropriate proportion of the population that should be completing different levels of education²³. In South Africa it may be that employers are increasingly demanding higher levels of qualification as a result of the very weak education people receive in many primary and secondary schools in South Africa. Schooling is no longer a signal of having mastered certain competencies (Van der Berg et al, 2011; Gustafsson, 2011). It is partly in this context that there is pressure for employees to be increasingly more formally qualified, though we should note that there is an international trend of increasing proportions of the population obtaining higher education qualifications.

StatsSA Quarterly Labour Force Survey data shows that while the state employs 25% of the workforce, it employs 40% of graduates in South Africa (StatsSA Quarterly Labour Force Survey, 1st Quarter 2015). Based on interviews with a small sample of departments, as well as estimating the kinds of professional skills required with the implementation of SIPs and other policies, including the National Skills Accord, it is estimated that there will be an increased demand for personnel with post-Matric qualifications, and in particular, those with degrees. An increased supply of well-educated graduates is therefore needed to meet demand in the public service.

There has been an increase in the number of students completing undergraduate and postgraduate qualifications in South Africa over the five-year period, 2009 to 2013, of 4.9% and 7.9% respectively.²⁴

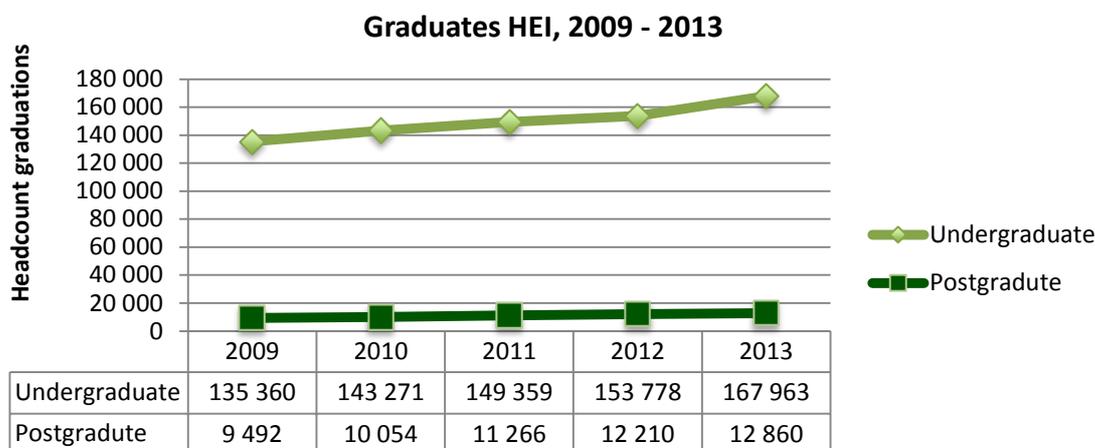
²¹To obtain an NSC a candidate must achieve either 40% or 30% per cent (depending on the minimum requirements for the particular subject) in six subjects. In the seventh subject a candidate is allowed to achieve less than 30% (Department of Basic Education, 2014).

²² These very poor learning outcomes (Taylor et al, 2011) are shown in local and international assessments such as the Department of Education's Systemic Evaluations, and the TIMMS, PIRLS and SACMEQ studies respectively. See Trends in International Mathematics and Science Study, 2002; the Progress in International Reading Literacy Study results, 2006; the Southern and Eastern African Consortium for Monitoring Education Quality surveys of 2000 and 2007.

²³ See for example Allais, 2005 for reference to the international debate, see Meny-Gibert, 2012 for local debates on secondary schooling versus TVET training.

²⁴ HEMIS data for 2013, published 2014 on the DHET website: www.dhet.gov.za

Figure 1: Graduates from all public higher education institutions in South Africa, 2009-2013



Source: HEMIS, 2014

Black African graduates represented 66% of total undergraduate passes in 2013 (up two percent from last year), but only 43% of the postgraduate passes (up by only 1% since last year) (HEMIS, 2014). More black African women obtained an undergraduate degree, certificate or diploma in 2013 than black African men, though the number of African female graduates decreased slightly since the previous year, and the number of male African graduates increased (HEMIS, 2014).

We should note that whilst graduation numbers have been increasing in many fields over the last five years, throughput rates²⁵ from universities are very low, making the education system in South Africa very inefficient²⁶(throughput rates from TVET colleges are even more worrying – see the section below this).

Almost all public higher education institutions in South Africa offer degrees or diplomas in public administration. There are, however, a range of degree and diploma qualifications that provide the kinds of skills required for entry into the public service. Different sectors of the public service may require different sector-specific knowledge (in health, education, the built environment and so forth).

Graduate figures for 2013 figures per CESM category (Classification of Educational Subject Matter) are provided below. Graduation numbers increased in all subjects from 2012 to 2013, with the exception of postgraduate degrees in education and undergraduate degrees in visual and performing arts. The CESM categories with the highest number of graduates are, 'Business, economics and management studies' (27% of total graduations), followed by education, engineering and health.

²⁵ The percentage of students who graduate from the initial enrolment cohort

²⁶ A 2009 report by the Council for Higher Education (CHE) noted that less than half of those enrolled in bachelors or national diplomas are projected to complete their studies (CHE, 2009). A more recent report by the CHE (2013) notes that dropout rates from higher education are still very high, as are failure rates.

Table 16: Graduates²⁷ at all Higher Education Institutions in South Africa, 2013

1 st order CESH category	Undergraduate	Postgraduate
AGRICULTURE, AGRICULTURAL OPERATIONS AND RELATED SCIENCES	3 312	391
ARCHITECTURE AND THE BUILT ENVIRONMENT	2 745	428
VISUAL AND PERFORMING ARTS	2 855	186
BUSINESS, ECONOMICS AND MANAGEMENT STUDIES	46 390	2 661
COMMUNICATION, JOURNALISM AND RELATED STUDIES	3 785	131
COMPUTER AND INFORMATION SCIENCES	6 269	295
EDUCATION	37 421	792
ENGINEERING	12 211	1 073
HEALTH PROFESSIONS AND RELATED CLINICAL SCIENCES	10 783	1 585
FAMILY ECOLOGY AND CONSUMER SCIENCES	604	33
LANGUAGES, LINGUISTICS AND LITERATURE	3 274	380
LAW	5 928	793
LIFE SCIENCES	4 825	906
PHYSICAL SCIENCES	4 402	821
MATHEMATICS AND STATISTICS	2 223	269
PHILOSOPHY, RELIGION AND THEOLOGY	943	406
PSYCHOLOGY	6 163	593
PUBLIC MANAGEMENT AND SERVICES	5 951	376
SOCIAL SCIENCES	7 879	741
TOTAL	167 963	12 858

Source: HEMIS, 2014

The public service will be competing with the private sector for the best available graduates, especially for black graduates from the better-ranked universities in the country. In the case of students graduating from public administration programmes, many may apply directly to departments in the public service – though here too the public service may compete with the private sector for graduates.

StatsSA estimates that the broad unemployment rate for graduates in South Africa in 2014 was just over 6%, as it was last year (StatsSA Quarterly Labour Force Survey, 1st Quarter 2015). Research by the DPRU (2006, cited in PSETA, 2011) suggests that the problem of unemployed graduates is largely driven by employers' perceptions of the poor quality of training and education provided to graduates in some higher education institutions, shortfalls in the supply of graduates in particular sectors and an oversupply in others, and graduates not being prepared to work for entry-level salaries set by some employers.

TVET colleges enrol fewer students than higher education (37% versus 51%), though enrolment in these colleges has increased substantially over the last few years (DHET, 2015). This in part due to the policy objective of expanding enrolment numbers in this sector. Just

²⁷ The number of students who fulfilled the requirements for a degree/diploma/certificate according to major(s)/area of specialisation and qualification type.

over 794 250 students enrolled in public and private colleges in 2013 (DHET, 2015).²⁸ However, at present many of those students who enrol for a programme will not sit for the final exam (see figures in the DHET's 'Statistics on Post-School Education and Training for 2012', published 2014) and a low percentage of those who sit for the examinations pass. The table below is taken from the DHET's latest publication on post-school education and training statistics (DHET, 2015). The pass rate for NC(V) 4 was 37%, for Report 191 NC, 40% and for Report 191 N6, 36%.

Table 17: Number and percentage of students in public and private TVET college who wrote and passed by qualification type, for 2011, 2012 and 2013²⁹

Year	NC(V) Level 4			Report 191 N3			Report 191 N6		
	Number wrote	Number completed	Completion rate (%)	Number wrote	Number completed	Completion rate (%)	Number wrote	Number completed	Completion rate (%)
2011	17 836	7 638	42.8	2 909	1 366	47	2 428	1 488	61.3
2012	15 334	6 018	39.3	9 928	3 724	37.5	8 735	2 902	33.2
2013	22 470	8 346	37.1	65 788	26 186	39.8	52 052	18 584	35.7

Source: DHET (2015), *Statistics on Post-School Education and Training in South Africa: 2013*.

Most TVET college programmes will require placement in a workplace and the completion of a period of work experience in order to qualify for their certificate or diploma. (We cover further issues related to learning in the workplace in the section below). In 2013/14, 15 277 artisans were certified in South Africa (DHET, 2015).

A range of interventions have been initiated to improve learning outcomes in the case of the TVET college sector. The recently established Quality Council for Trades and Occupations is tasked with improving the availability, relevance and quality of occupational qualifications to meet industry needs. To the extent that there is trade-off between increasing enrolments and attention to improving the quality of education and passes, there appears to be a need for a far greater focus on the latter now that a healthier enrolment had been achieved.

The qualification 'Report 191 N6' offers a qualification in public management – 554 passed this course in 2013 – this was a 33% pass rate. Higher education institutions produced 5951 undergraduates in public administration in the same year (HEMIS, 2014). We should note though that in practice, entry into many positions in the public service requires an undergraduate degree.

²⁸ The latest publically available report on enrolment and graduations from TVET colleges is for the 2013 academic year.

²⁹ The National Certificate (Vocational) (NCV) is a qualification offered by TVET colleges at NQF levels 2 to 4. Students receive practical, industry-focused training that enables them to seek work in a range of fields such as business administration, hospitality, and engineering and applied technology. Applicants to these programmes must have a minimum of a Grade 9 pass. NATED or Report 191 courses are programmes that consist of 18 months theoretical studies at colleges and 18 months relevant practical application in work places. Engineering studies range from N1 – N6 while Business and Utility Studies range from N4 – N6. Applicants are required to have Grade 12 for admission to study from NQF Level 4. Source: http://www.fetcolleges.co.za/Site_Courses.aspx accessed June 2014.

Like many other sectors in the South African economy, the supply of skill to the public service is constrained by the quality of education provided to learners and students in school and higher education institutions. A PSSC report to the HRD Council notes that many post-school institutions in South Africa do not have adequate capacity to serve the needs of the country (DPSA, 2013). These post-school institutions are, however, affected by the poor learning outcomes of the school system (Council on Higher Education, 2013). A 2013 Council on Higher Education (CHE) report notes that the high dropout and failure rates in higher education institutions are primarily caused by poor academic preparation at school (CHE, 2013). The report noted that there is "no prospect" that the schooling sector will be able to produce the numbers of adequately prepared matriculants that higher education requires "in the foreseeable future" and as an interim palliative measure, it has recommended extending undergraduate degrees from three to four years (CHE, 2013).

In some sectors skills supply is further affected by demand-supply mismatches. This includes regional mismatches in which the supply of skill in that geographic area does not meet demand. Offices outside the major metropolitan centres experience these issues more acutely – for example in skills such as engineering.

3.3.2. Learnerships, internships and other forms of training provided by departments

We now take a look at training and development in the public service workplace, including learnerships and internships.

Learnerships are structured learning programmes for gaining theoretical knowledge and practical skills in the workplace – offered through an agreement between a training provider (public or private) and a workplace and which lead to a qualification registered on the National Qualifications Framework (NQF). Employers may develop and register their own learnerships, supported and quality assured by their relevant SETA. Learnerships include artisanships and they can be the delivery mechanism for a range of occupational qualifications.³⁰In 2013/14, 75 782 people in South Africa were registered for learnerships (across the public and private sectors), and 38 786 were certified (i.e. completed) (DHET, 2015).

Public servants may take up learnerships offered by a range of SETAs. Those registered with PSETA focus primarily on transversal skills associated with management and administration. PSETA has registered and quality assured learnerships in general public administration, record keeping, inspection and enforcement, management, human resources, purchasing and stores management, business administration, programmes aimed specifically at personnel in Home Affairs, amongst others. Five hundred and six public servants in PSETA's departments were registered for learnerships in the last financial year (2013/14), and 78 completed learnerships. Five hundred and ninety seven public servants in PSETA's departments entered skills programmes, and 575 completed skills programmes in the 2013/14 financial year (PSETA, 2014).

³⁰ Occupational qualifications are NQF registered qualifications, which are quality assured by an Education and Training Qualifications Authority or any other statutory quality assurance body.

PSETA has found that officials generally prefer mainstream university qualifications to learnerships. Learnerships and skills programmes registered with PSETA that have had the highest take-up are those that have been “demand-led” – those courses which were established for their staff by departments – such as DIRCO’s courses –and which speak to a very specific training need.

Regarding the public service as a whole, Persal data shows that in 2015 there are 3 458 people in the public service on learnerships, down by about 200 from last year (Persal database, May 2015). Twenty three percent were classified under the Persal occupational category ‘Professionals and Managers’, and 22% under ‘Administrative Office Workers’. Only a handful were classified under the category, ‘Craft and related’ (under which artisans fall).

As part of the policy focus on “opening up the public service as a training space” (HRD Council, 2014), departments have been encouraged to take on increased numbers of interns. Just over five thousand (5176) interns are recorded on the Persal database this year (Persal database, May 2015). Thirty four percent of these interns were classified under the Persal occupational category, ‘Professionals and managers’ and 46% under ‘Administrative office workers’ (Persal database, May 2015). In the departments reporting to PSETA, 971 people were provided with internships in the 2013/14 year, and 465 completed an internship (PSETA, 2014).³¹

According to a 2012 government directive, part of departments’ budgets should be used for training unemployed graduates or learners from TVETs – apart from internships, this includes providing bursaries, and access to Work Integrated Learning opportunities for people requiring workplace based experience to complete their qualifications. In departments reporting to PSETA, 187 unemployed graduates entered learnerships and 42 completed a learnership, 119 were awarded bursaries and 56 completed bursary funded programmes paid for by the sector, and 109 entered Work Integrated Learning opportunities (PSETA, 2014). In 2013/14 PSETA facilitated placement of learners requiring Work Integrated Learning (we discuss this work in more detail in Chapter Four – on PSETA’s partnerships).

Internships are potentially the most important bridge between the skills pipeline and public service employment. The DPSA Policy on Internships directs all departments to take on a minimum of 5% of their staff complement as interns each year. The internships are sometimes funded through departments’ skills development budgets, but in many cases are funded over and above the budget departments allocate for skills development in departments. Internships are therefore an expensive strategy. Not only do departments incur the direct costs of the stipends paid to interns, but the time invested by existing employees in recruiting, inducting and supervising interns is a substantial indirect cost. Improving the recruitment, selection, placement, induction, coaching and subsequent absorption of interns is therefore key to building a more skilled and capable workforce, and to improving the return on this substantial investment.

³¹ PSETA’s annual report (2013/14) notes that PSETA has had difficulties collecting data from all reporting departments, and this figure may thus be an undercount.

The success of learnerships, artisanships, and internships rests on the ability of departments and public entities to effectively provide workplace training. The recent government commitment to opening up the public service to act as a training space is welcome. Yet not all departments and public entities currently have the capacity to effectively train those learners and interns placed in their organisations. Last year's SSP noted that reviews have shown that in some departments, interns have not been appropriately placed in units/functions that build on their formal skills training and that they have not been effectively supported to improve their skills. A few departments have developed more effective internship programmes, for example the Limpopo Treasury (interview with HRD Director, Limpopo Treasury, July 2015), the National Treasury (interview with National Treasury HRD unit, 2013) and DIRCO.

It is of course, not only new entrants into the public service that require training. We have outlined some of the areas in which public servants require capacity building earlier in this chapter. Reviews of skills development initiatives undertaken by the public service show that over the last two decades a substantial proportion of public servants have received training and that substantial funding has been spent on this training. These studies also show, however, that the return on investment has generally been low in terms of the impact on public sector performance (PSC, 2011; PSETA, 2011; DPSA, 2013; Pillay et al, 2011; interviews with officials in the DPSA, June 2013). Much of the training has been in the form of short courses by private providers (Huluman, 2011), which appears not to have substantially altered the skills profile of officials, even where the stated outcome of the training is in line with the skills requirements of the officials' job. The NPC has noted that the "management" or "leadership" training undertaken by public servants has not had the intended impact on improving performance (NPC, 2012). The PSC (2011) has found that departments do not use the skills budgets effectively or efficiently. Interviews with the DPSA suggest that in many cases departments have not shaped their training initiatives strategically, and many staff have attended training in areas unrelated to their work (personal communication, Chief Director in the DPSA, June 2013). Individual training needs to be linked to organisational contexts, goals and capacity needs. Yet PSETA's research for this and previous SSPs has shown that most departments are not shaping their training needs and that training needs are often identified by simply aggregating individual PDPs.

The focus on developing the public service as a training space requires developing the competency of public servants already in the system – especially those of managers. Last year's SSP emphasised that this capacity is unlikely to be developed primarily through formal training qualifications. Research suggests that "most learning in the workplace is incidental, rather than the product of formal training" (O'Keeffe, 2002). Proficiency or competency in a particular occupation or area of work (especially at middle management and operational levels) is often learnt "on the job" and perfected over long periods of service in a particular area and deep familiarity with a particular scope of work or subject matter. We have noted that Home Affairs attributes the successful training of officials associated with its turnaround strategy (the dramatic improvement in the efficient delivery of identity books) to a focus on on-the-job training and mentoring, rather than external, "classroom training" (Mkhize, 2011). The Department notes that, "The DHA [Home Affairs] experience demonstrates there is also a need for on-the-job training, coaching and

mentoring as a learning methodology, especially for turning around frontline service delivery processes”. (Mkhize, 2011).

Building capacity in the National Treasury (which was a very weak institution in the later days of apartheid) was supported by the long-term secondment of expertise from other departments, and foreign expertise from other treasuries. A case study of the post-apartheid National Treasury notes that long-term secondments were preferred over short term contracting of consultants, which saw the transfer of capacity over time (Dagut, 2007).

There are thus a number of departments who are developing strong strategies to support training and capacity building in their organisations. Training and recruitment of new officials has been shaped by a strategic prioritisation of the skills needs of the department interviews with HRD in DPSA, June 2013; DTI, Home Affairs and National Treasury, 2013). Success in these departments also appears to have been tied to departments building partnerships with education institutions that help shape the most appropriate form of sector specific training for new and existing staff – this includes training aimed at developing both technical and generic skills.

Departments in the public service that have managed to develop a culture of mentoring staff have established this on the basis of a number of “preconditions”. These have included stabilising the senior management and retaining the staff of experienced managers and professionals, the strategic placement of HR and recruitment of HR practitioners with strong proven abilities in HRD, and stringent criteria for selecting new staff.

3.3.3. Public service training institutions

There are a number of public service training institutions undertaking training and development within the public service. As noted in Chapter One, academies exist at national government and provincial level, as well as within specific government sectors. A number of the provincial academies do not appear to be working very effectively. The academy of the Western Cape has started to develop strong in-house capacity for training, and some of the sector academies are working well.

The recently established National School of Government will offer a range of qualifications to public servants, which aim to provide for career advancement and professional development to overcome the current misalignment between departmental strategies and skills. As noted, the exact form of the School will take and its relationship to the other provincial and sector academies is still to be decided. At present it has been mooted that the School will be registered as a higher education institution. Whether this route is pursued or not, the School will also need to develop strong capacity in supporting occupational based qualifications.

The initial focus of the National School of Government has been the introduction of the Compulsory Induction Programme (CIP), (first rolled out under PALAMA). CIP has been implemented in a number of departments. It aims to induct all new public service employees into the government sector. All current employees will also have to attend CIP. Many departments that PSETA spoke to in preparation for last year’s SSP, welcomed the

CIP, but noted that if it is to be effective the implementation of CIP must be appropriately paced. And that it should be reviewed and evaluated before being taken to full scale. PSETA understands that there have been problems with the slow roll out of CIP affecting the Department's ability to confirm the appointment of new staff at the end of their probationary period – the initial plan was that people on probation who have not undergone CIP training were not to be confirmed for permanent employment. PSETA understands this plan has now been put aside.

Once rolled out the CIP could assist senior managers in holding their staff accountable for compliance with regulations, as staff will have been appropriately informed of the content and purpose of regulations pertaining to the public service. However, CIP will not directly address the challenges to developing the operational capacity that this SSP has identified.

Where the School has a potentially very important role to play is in the development of cohort training. Cohort training has been a striking feature of the approaches to training of more effective bureaucracies internationally. Training is provided in groups who 'travel together', as it were, through the ladder of learning. This is evident in common processes throughout the employment life cycle from recruitment, induction programmes, and other forms of on-going training. State run academies or public service schools (for example in India, France and China) are one key means through which this common training takes place. France has a wide network of civil service schools that focus on all levels of the administration from executive to secretarial functions. These are separate from public universities and are run by the state. These schools offer training before officials enter the public service. The schools focus on particular knowledge or skills areas. One effect of this 'group pathway' form of training is to produce a sense of camaraderie and common purpose – of particular relevance for the NDP's call to "professionalise the public service". The model that a number of countries have opted for, including Brazil, is that those wishing to enter the public service must first receive training in schools orientated towards developing professional and administrative skill for the public service, and must then pass a stringent entrance exam in order to become a state employee.

Developing a strong in-house teaching body and strong curriculum content will be essential for the School to play a meaningful role in building the capacity of the state. In order to achieve this in-house capacity and in order to effectively deliver cohort training (a "cadet school" for professional public servants), the School will require substantial resources. It is critical that the School pilots the development of new teaching approaches and curriculum content, and undertakes substantial reviews of these pilots before rolling out training at scale. PSETA suggests that capacity can only be achieved incrementally over a long period of time – the challenge facing all institution building.

One last note on training for current public servants: there has been much discussion in the public domain about the lack of a service-oriented culture amongst many public servants. Changes in values and norms are generally not affected by time spent in short courses on values and ethics. In line with the evidence presented above about the value of training cohorts of public servants through long-term training (building skills, but also a common sense of purpose and commitment to the public service), the new National School of

Government has the potential to play a fundamental role here if curriculum and delivery models are carefully piloted, and a strong faculty of teachers is developed.

3.4. Identification of scarce skills and skills gaps

The analysis earlier in this chapter pointed to the following skills in demand and/or in need of further development across the public service:

- There is a need for more personnel to take up positions in technical and professional occupations, including artisans posts – especially technical skills needed to support infrastructure development and maintenance. There is also a need to improve the skills of artisans. In the case of many of these occupations, the responsibility of supporting increased supply of personnel lies primarily with other SETAs. However, PSETA is partnering with appropriate organisations to help address these shortages, especially where such partnerships help address the managerial competencies of professionals in management positions (build environment specialists managing large infrastructure projects for example).
- There are competency gaps in middle and senior management in the public service – specifically in managers’ ability to develop operational plans, systems and monitoring tools to effect strategic priorities set at the senior administrative and executive level. This has knock-on effects for basic administrative systems (such as accurate record keeping and archival skills etc. – in the latter occupation there is a small shortage);
- There are competency gaps and skills shortages in public financial management in general and a need to improve the competencies of staff in strategic procurement and contract management in particular;
- There are competency gaps in HRM (resource planning, recruitment and so forth) and HRD (in supporting strategic skills development and retention of experienced and skilled staff);
- In addition, changes in the way in which departments are being encouraged to offer certain forms of training (such as via e-learning) and the call for the public service to act as a training space has implications for the kind of capacity needed in departments. Specifically, improved competencies are needed in HR and in management in general to support work integrated learning, internships and mentoring more generally.

Regarding technical and professional skills for infrastructure development and maintenance, officials working on developing the Infrastructure Development Management System (IDMS)³² suggest that there are too few personnel in most key professions related to infrastructure development such as architects, quantity surveyors, town planners and so forth. In some occupations, such as electrical engineering and geographical information systems, these shortages in the public service are related to absolute shortages in the labour market in the country. However, in most professional occupations shortages in the public service relate more to regional demand-supply mismatches, poor recruiting practices in the public service (affected by a complex range of factors), and in the regulations (and related remuneration structures) pertaining to hiring professionals and artisans in the public

³²IDMS has been developed by government (in partnership with the Construction Industry Development Board; it aims to provide a coordinated system for procuring, developing, managing and physically maintaining the various infrastructure projects.

sector. Research commissioned by the Presidential Infrastructure Coordinating Committee reported that the state has haemorrhaged professional and technical capacity to the point at which it is no longer possible to rebuild these skills within the state. In some of the professional occupations, professionals must be professionally registered before they can apply for a post. In order to be professionally registered, however, they must work for at least three years under the supervision or mentorship of a more experienced professional – and then apply for a government post. Where no such registered professionals exist, it is not possible for the state to incubate these skills internally. The public sector loses many young professionals to the private sector as a result.

Challenges to recruiting and utilising the skills of artisans lie in the fact that the TVET college training is not equipping artisans for their trade, and that the states has a limited ability to professionally mentor and supervise new artisans. A 2013 PSSC report notes that, “The trades remain a key skills shortage in the country as a whole” and that forecasts show that even with the increased focus on training new artisans, the increase will not be sufficient to respond to demand over the next five years.” (DPSA, 2013). According to Persal, there are 9 519 people currently employed in the category ‘Craft and related trades workers’, with a vacancy rate varying from 12% to 29% in different categories of trades related to technical professions.

The scarcity of engineering and artisan skills also has implications for South Africa being able to transition to a more ‘green economy’. The Department of Environmental Affairs, in partnership with associated government departments and civil society, has embarked on initiatives focusing on addressing skills gaps in the environmental sector.

Regarding public financial management and procurement in particular, a National Treasury report (2014) notes that, “South Africa’s shortage of skills is felt sharply in PFM [public financial management] with the public sector falling behind in the competition for scarce skills. ... Projections indicate that the supply of graduates and professionals entering the market is inadequate to keep up with increased demand.” They note further that, “The situation is made worse by a high turnover rate in PFM [Public Financial Management], averaging 14.6 months.” (Ibid).

We have noted the need for capacity building of public service managers. There is no shortage of people with management qualifications in South Africa. However, there are competency gaps in managers ability to develop operational plans, systems and monitoring tools to effect strategic government priorities.

The DPME’s Management Performance Assessment Tool (MPAT) “assesses the quality of management practices”, with a focus on compliance measures in four areas: Financial Management, Strategic Management, Governance and Accountability and Human Resource and Systems Management (DPME, 2013). Departments are measured on a scale of 1 to 4; a score of 1 signals “non-compliance with legal/regulatory requirements” and a score of 4 signals that there is “Full compliance” and that a department is “doing things smartly” (such as meeting performance targets and using compliance to improve delivery) (DPME, 2013). Assessments were first carried out in 2011/2012 and again in 2013. DPME’s 2012 report on MPAT noted that, “the overall picture presented on the compliance of national and

provincial departments with the minimum requirements stipulated in the legislation, regulations and guidelines is not a positive one. There are areas where departments appear to be achieving reasonable levels of compliance, namely, in Strategic Management and to some extent in annual reporting compliance. Compliance levels in certain elements of Human Resource and Systems Management and Supply Chain Management are below what is required for a well functioning and capable public service.” (DPME, 2012). Analysis of the 2012 MPAT data shows that of the four management areas, the HR component of MPAT has the largest and most direct influence on departments receiving higher performance ratings on external assessments such as the Auditor-General’s findings (DPME, 2013). An effective and autonomous HR function is important for stabilising administrations and developing clear and attractive career paths for officials. Well-functioning organisations require strong technical capacity – and this in turn requires effective capacity to recruit the appropriate staff (given the mandate and functions of the organisation) and an ability to effectively train and retain staff.

In conclusion, research commissioned by PSETA shows that the capacities of government departments are uneven (PSETA, 2013). In some places relatively effective administrations are in place. In many other places, however, the machinery of government is weak or has not been properly established. In such cases performance is contingent on the often tedious work of organisation building: creating organisational stability, putting in place a reliable and effective administration (record keeping, filing, minute-taking etc.), ensuring a well capacitated HR unit plays a central role in the department (which can drive appropriate recruitment, link training to organisational priorities, assist in stabilising departments), and linking strategy and vision to careful and realistic operational planning. One of the key drivers of institutional performance is a management cadre that is operationally inclined, that is, able to translate policy into carefully designed operational plans and implementation networks.

In the context of South Africa (as with other public services that have undergone rapid transformations or which do not have long histories of effective bureaucracies), there is a need to focus on those skills associated with organisational development. Therefore, ***skills training has to be considered in relation to building the capacity of departments and agencies to improve their ability to perform in terms of their mandates i.e. skills involved in organisational development. This focus is particularly relevant for PSETA given its focus on the developing “transversal skills”.***

Given this analysis, the list of scarce and critical skills with relevance for PSETA’s scope of coverage that were agreed by PSETA’s stakeholders are as follows in the table below. *Note that PSETA will also consider interventions to support any priorities identified in Chapter 13 of the NDP.*

Table 18: List of scarce and critical skills

OFO Code	Occupation
Management and administration	
111202	General Manager Public Service
111204	Senior Government Official
111207	Senior Government Manager

112101	Director (Enterprise / Organisation)
121301	Policy and Planning Manager
121905	Programme or Project Manager
121908	Quality systems manager
134904	Office Manager
134907	Archives Manager
134915	Operations Manager (Non Manufacturing)
242210	Business Administrator
252101	Database Designer and Administrator
252201	Systems Administrator
262101	Archivist
Professional and technical skills in support of SIPs	
132301	Construction Project Manager
132302	Project Builder
134901	Environmental Manager
214201	Civil engineers
214904	Quantity surveyors
216502	Land and engineering surveyors
333401	Property Manager
333406	Property Lease Administrator
333907	Property Portfolio and Asset Manager
351301	Computer network technicians
HRM and HRD	
121201	Personnel / Human Resource Manager
121202	Business Training Manager
121204	Recruitment Manager
121907	Labour Recruitment Manager
242302	Skills Development Facilitator / Practitioner
242401	Training and Development Professional
242402	Occupational Instructor / Trainer
333301	Recruitment Consultant / Officer
SCM and contract management	
121101	Finance Manager
121903	Physical Asset Manager
121904	Contract Manager
132401	Supply and Distribution Manager
132404	Warehouse Manager
241101	Cost and management accountants
332302	Procurement officers
333905	Supply Chain Practitioner
333911	Physical Asset Practitioner

Chapter 4: Sector Partnerships

4.1. Introduction

The following chapter outlines PSETA's partnerships in support of skills development. This covers partnerships with TVET colleges and Higher Education Institutions (universities and universities of technology), with the new National School of Government, with other SETAs, partnerships with PSETA's constituent employers, with central government departments with a mandate to support skills development and HRD, and research partnerships.

4.2. Existing partnerships

The DHET considers **TVET colleges** important partners for the SETAs in skills development. The sector is relevant for PSETA's work in the following respects: first, some colleges have qualifications specifically designed for occupations in the public service relevant to PSETA's focus on transversal skills – including, for example, public administration qualifications. Second, the college sector is important for the supply of artisan skills to the public service – PSETA has been mandated to play a role in supporting artisan development under the National Skills Accord. In this regard, PSETA has a partnership with INDLELA geared to assist it evaluate artisan and trade assessment and training centres.

The DHET has been encouraging SETAs to accredit TVET colleges as training providers for learnerships (historically much of the training accreditation has been by private training providers), as part of a broader commitment to increasing the use and development of public education institutions. PSETA has now accredited most colleges offering courses relevant to PSETA's sector focus.

The PSETA has developed lecture exposure to the public service strategy in the financial year 2013/14. At the time the strategy focused on TVET lecturers only and excluded the higher education institutions' lecturers. The strategy is currently under review to include the later category of lecturers. So far, the PSETA has held introductory meetings with KwaZulu-Natal's Office of the Premier and Durban University of Technology, Free State University, two TVETs, namely Motheo and Gold fields, the Department of Rural Development and Enhlanzeni.

PSETA has a partnership with the Education, Training and Development Practices SETA (ETDPSETA) and with all 50 TVET Colleges. The purpose of the partnership is to ensure youth are exposed to public service careers. Student support officers are trained to offer career guidance for learners wanting to enter a career in the public service. PSETA and ETDPSETA have placed people in all TVETs.

PSETA is also mandated by the DHET to play a facilitating role in supporting Work Integrated Learning. PSETA has developed a strategy to support this, and has initiated a number of projects in support of Work Integrated Learning. TVETs are key partners. PSETA has signed MOUs with five TVET colleges and one higher education institution, with the aim of placing their learners in workplaces to enable the learners to complete their qualifications. PSETA

has begun to play a role in matching learners and public service departments willing to offer relevant workplace exposure. PSETA plans to expand on this project in the near future – we provide details in the following section of this chapter on new partnerships.

PSETA's partnerships with TVET colleges have not been without challenges. Many colleges are stretched for capacity (administrative and management capacity) and developing effective working relationships takes a good deal of time. Further, better clarity is needed in the post-school education and training sector and the public service as to the precise role that the TVET college sector should ideally play in the development of transversal skills for the public service, and in qualifications outside of the technical occupations (for example, in the range of administrative and clerical occupations). The recruitment and HR practices more broadly in the public service then needs to align with the role envisioned for TVET colleges and the qualifications they produce. PSETA will raise this topic for discussion with DPSA (see further details under the section on new partnerships).

PSETA also has **partnerships with other SETAs** to maximise the impact of its work (especially important given PSETA's small budget). PSETA has a partnership with FASSET focused on developing the state's financial management capabilities. We have outlined the partnership with ETDPSA in support of exposing unemployed youth and learners to public service careers. PSETA has also played a role in facilitating the development of partnerships between other SETAs and sector stakeholders. One of the challenges facing PSETA's work in this regard is that PSETA is not able to report (in terms of the current reporting formats) the time staff put into facilitating such partnerships, whereas these projects can be reported on by other SETAs. Further, there are also financial constraints to developing co-funding arrangements with other SETA. PSETA plans to discuss these issues with National Treasury over the next year to find mechanisms to better support such arrangements.

Key partners in PSETA's work include its **constituent employer departments**, especially those that are not covered by another SETA. PSETA's work with departments and public entities takes a number of forms, including PSETA providing support to departments for skills development. For example, PSETA runs a number of training programmes for public service managers on supporting workplace-based training. This has included training for managers in the public service looking to play a mentoring role in their department – this programme began in 2012, and all departments are invited to nominate people for training. In the last financial year, 110 people were provided with training on mentoring; in the year prior to this, 235 people were trained. Some departments have communicated with PSETA that they found the courses valuable, whilst others have noted that the courses could be improved by developing programmes designed to cater for specific sectors (i.e. rather than generic guidance for mentoring). PSETA is currently exploring this option.

PSETA has also played a facilitation role for departments wanting to support the Recognition of Prior Learning for some employees. PSETA has facilitated conversations between departments and INDLELA for obtaining this recognition for artisans.

Specific projects between PSETA and client departments include a project with the Government Technical Advisory Centre (GTAC), government's internal technical advisory consultancy, based in the National Treasury. GTAC's work with client departments (i.e.

those departments it offers its services to) involves capacity building in operations management (for example, in developing planning and costing tools and so on). PSETA is partnering with GTAC to develop the content of this informal training into a formal training programme that GTAC can offer to all its client departments.

PSETA's departments are also a key source of information for PSETA – PSETA has drawn on the experiences of better performing departments (in terms of their skills development and HRD initiatives) to develop lessons and ideas for other departments looking to improve their capacity building efforts.

PSETA has a **research partnership** with PARI at the University of the Witwatersrand. PARI provides research support for developing PSETA's annual SSP and for wider planning. The partnership also includes the PSETA-PARI scholarship programme, which provides scholarships to postgraduate students focused on research relevant to PSETA's mandate.

4.3. New partnerships

PSETA now has a somewhat expanded budget, which will enable it to play a more substantive role in the sector over the next few years.

PSETA has a **strategic relationship with DPSA** as the custodian of HRD policy in the public service to ensure skills improvement for quality public services. PSETA and DPSA are currently developing a memorandum of understanding to support collaboration on the sharing of data relevant to skills planning and HRD in the public service, and to support better integration of data reporting templates. PSETA also aims to further develop dialogue on critical issues affecting skills development in the public service, such as ensuring that performance management systems in departments incentivise skills development, and that clearer policy guidelines are developed on the use of budgets and other resources for skills development etc.

Supporting the priority skills identified by PSETA in this SSP will require developing new curricula for some qualifications offered by **higher education institutions**. PSETA considers the development of improved curriculum content for public service *managers* of particular importance. PSETA is currently planning a dialogue with schools of public administration in the universities about how to develop curricula that are more relevant to the demands of management in the public service in South Africa. PSETA is also in discussion with the University of the Witwatersrand about developing programmes to support training on monitoring and evaluation.

As mentioned in Chapter Three the exact form that the new **National School of Government** will take and its relationship to other **state academies** and PSETA is still being decided. PSETA is currently in conversation with the School about the form of potential partnerships. An area identified for collaboration is building the state's capacity to deliver training through e-learning. (The PSETA Stakeholder Workshop on Priority Skills (2014) agreed that PSETA should explore a partnership with the National School of Government and the State Academies Forum in addressing the development of training on a range of generic skills through e-learning). As will be discussed further in Chapter Five, developing

strong capacity in e-learning is needed to provide public service training at scale. PSETA has consulted with the e-learning division in the National School of Government: the School has a small team dedicated to developing e-learning software and curriculum content. In addition, a number of partners have indicated a willingness to share their existing programmes on generic skills that may be of wider value (for example, the DIRCO programme on writing a submission; Stats Academy programs on basic statistical analysis; and Justice Academy programmes on the Promotion of Administrative Justice Act).

PSETA has also partnered with the National School of Government and Sectoral Academies and the Provincial Legislature with a view of developing the sector occupationally based qualifications.

PSETA is planning to **extend its partnerships with TVET colleges**. This work will take a number of forms. The first will be in further expanding PSETA's work with TVETs in developing career guidance practitioners with a specialisation in providing advice on careers in the public service. PSETA will draw on the resources already developed by organisations such as CHE (CHE has developed useful guidelines on supporting work-integrated learning in organisations). Further, PSETA will expand its role in the placement of learners in government departments. Here PSETA aims to use existing databases – such as the DHET's public service recruitment database – to link learners to workplace opportunities, and then to further develop these IT platforms to improve the accurate "matching" of learners to workplace opportunities in line with their formal qualifications. Finally, PSETA aims to support TVET's in evaluating their curriculum content for qualifications aimed at careers in the public service. The aim is to develop curriculum content more relevant to the demands of public administration in South Africa.

PSETA has also begun conversations with **public entities** and the **provincial legislatures** to find out how to best support sector specific, skills development needs that are different from those of the public service departments, and to develop an agreement on funding frameworks for work with legislatures and public entities.

Last, and perhaps most important, PSETA has refined its strategy for working with its **government departments (constituent employers)** in supporting the priority skills identified in the SSP. PSETA has an important role to play in supporting the integration of skills development initiatives across government departments. PSETA will encourage departments to pool portions of their skills development budgets to achieve training more efficiently, and at scale. They will also be encourage to ensure that the training proposals are in line with the approach to the development of competencies outlined by relevant "champion departments" (most of the scarce and priority skills identified in chapters Three and Five have a departmental champion – in the case of SCM this champion is the OCPO, in the case of HRD the champion is the DPSA and so forth). We outline this strategy in more detail (to be operationalised through the strategic allocation of discretionary grants) in the following chapter.

Chapter Five: Skills priority actions

5.1. Introduction

Chapter Five summarises the findings from the previous chapters, outlines the skills for focused support from PSETA and outlines the plans and actions for supporting these skills.

The last two SSP Updates focused on developing an analytical approach to determining skills priorities. This year's SSP Update retains this approach. The approach highlights that skills development priorities cannot be identified simply from an analysis of the scarce skills and competency gaps of individual employees if we are to develop the state capabilities called for in the NDP. The approach uses organisational performance as the lens to thematise skills needs: a priority skill is one that will make the biggest difference to the performance of the public service. The priority skills detailed in this chapter have been identified using this approach to analyse the information presented in chapters One to Three. These priorities were confirmed and agreed by stakeholders attending the 2014 PSETA Workshop on Priority Skills for the Public Service (held in July 2014) and again at the PSETA national skills colloquium held in March 2015.

5.2. Findings from previous chapters

As outlined in Chapter One, PSETA is primarily responsible for the development of "transversal" skills across the public service (such as administration, management, policy development and so forth), as well as for skills development in functions undertaken exclusively by the public service (such as diplomacy).

Departments across the public service differ somewhat in terms of the occupations they find hard to fill and in terms of their skills gaps. Given PSETA's limited budget and the large range of skills in need of support in the public service, it is important that PSETA employs a strategic, focused approach in identifying which skills to support.

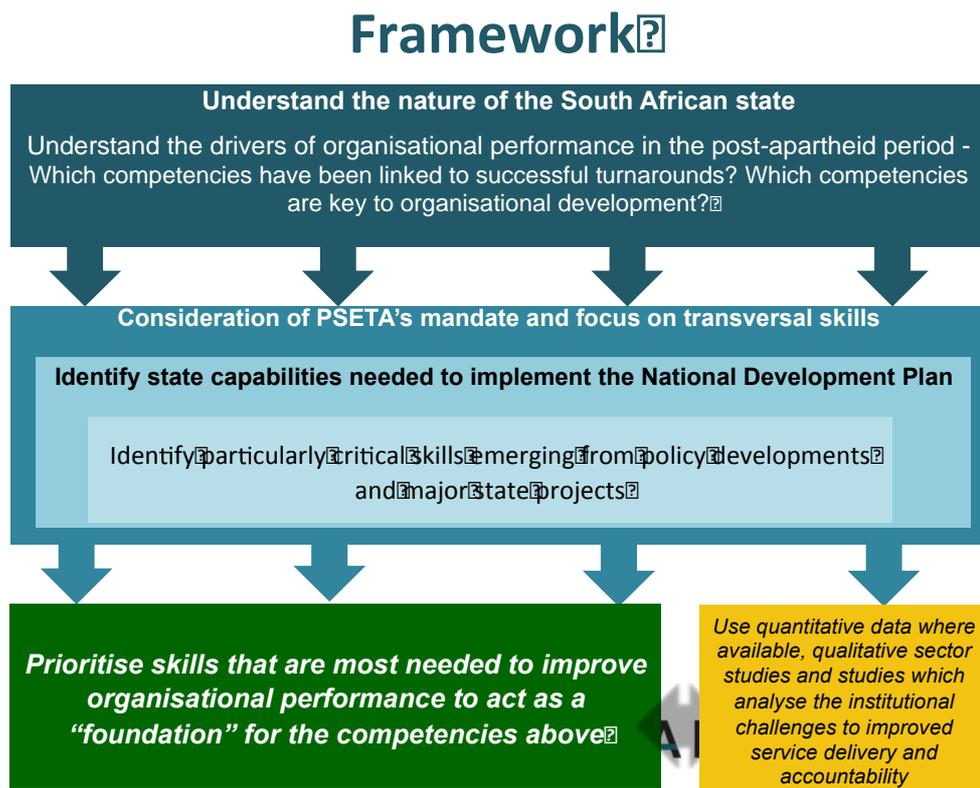
Analysis in Chapter Two showed that many departments have struggled to stabilise their senior leadership, develop career paths for public servants, to retain their staff, and to develop effective operational processes and systems. These remain the central challenges. Even if the formal education system produces more professional graduates, how do we incentivise them to join the public service? How do we ensure the best graduates are employed by the public service?

What we suggest is that in the context of South Africa (as with other public services that have undergone rapid transformations or which do not have long histories of effective bureaucracies), there is a need to focus on those skills associated with organisational development. *PSETA's focus over the medium term is on building capacity in those skills sets that are most directly linked to stabilising and improving the way in which organisations are managed, capacity building is facilitated and routine work is performed on a daily basis.* This focus also supports the National Integrated Human Resource Development Plan's (HRD

Council, 2014) and NDP's (NPC, 2012) calls to professionalise the public service, and to improve the state's capacity to act as a training space.

PSETA's approach for identifying its priority skills is summarised in the following figure:

Figure 2: PSETA approach to identifying priority skills for the public service



Our analysis in chapters Two and Three shows that operationally inclined management, strong HR and HRD and strategic procurement competency can act as a bedrock or foundation of organisational development in the public service. Improvements in HRD and management competencies will have knock-on effects for the state's capacity to retain scarce professional and technical skills and to develop capacity to mentor and train in-house. Improvements in SCM will have immediate impacts on service delivery, and will ensure state resources are effectively used. Should these competencies not be better developed they represent a risk to the effective and efficient functioning of government.

Where skills gaps are related to lack of knowledge about a specific task, guidelines, software and so forth, staff can potentially take part in cost-effective e-learning courses. Where these gaps are more profound, they need to include mentoring and or coaching, possibly supplemented by longer-term classroom based training. In the area of HRD, SCM and management training, the current curriculum in further education and higher education institutions is not yet adequate to support the needs of the South African public service, and curricula will need to be developed or adapted.

Chapters Two and Three also pointed out that departments need to be supported to be able to identify the nature of their staff competency gaps and what kinds of training are most

appropriate for developing capacity in these areas. This once again highlights the importance of the focus on building HRD skills. Further, the capacity for the public service to act as a training space is highly uneven and that departments should be encouraged to build this capacity over time, rather than pushing to take on as many interns and learnerships as possible to meet annual targets. PSETA can play an expanded role in this arena.

The analysis above has informed PSETA's strategy for supporting skills development over the short to medium term. We provide further details below.

5.3. Recommended actions

In summary, PSETA will prioritise development of the following competencies:

1. Improvements in professional and technical competencies, through a focus on support for the SIPs;
2. Development of more **operationally inclined and skilled management**;
3. Improve technical competencies in **SCM, including contract management**;
4. Improve competencies in **HRM and HRD**. With regards to HRD in particular, this will include a specific focus on:
 - a. Improving departments' competencies to provide training through **e-learning**;
 - b. Improving departments' competencies to supporting **work integrated learning and bridging into work**.

Broadly, these priorities will be supported through the following mechanisms:

1. **Work with relevant 'champions' of the competencies** outlined above (the OCPO in the case of SCM, DPSA in the case of HRM and HRD, NSG in the case of e-learning etc.) **to ensure alignment of training across the public service** and to more precisely identify the mechanisms through which improved competencies can best be supported;
2. **Support training providers** (especially public providers) **to develop more relevant and improved quality curricula** to address 'demand-supply' mismatches. This is especially relevant for the development of the curriculum in public administration/public management;
3. **Use the discretionary grants** as a mechanism/incentive to encourage departments to begin to pool resources, align their training approaches and support the development of the priority skills outlined above etc;
4. **Facilitate knowledge sharing** – departments that have developed successful training programmes, especially with regards to supporting work integrated learning and bridging into work, have indicated a willingness to share their experiences with other departments. These can be formally developed into practice guides for other departments;
5. **Market the public service as a career of choice** to support the recruitment of top graduates and artisans into the public service.

We should note that last year PSETA had to work with a smaller budget than expected – affecting its ability to meet all the targets in Chapter Five or last year's SSP. Over the last year, PSETA has nonetheless developed a focused approach for supporting the development of the 'priority competencies' outlined above. In Chapter Four (on PSETA's partnerships) we outlined elements of this approach.

In more detail: PSETA will use the discretionary grants to support proposals for skills development supporting priority skills, and that can show some degree of training at scale, at reasonable per capita costs. Departments will be supported to collaborate with other departments in their “government clusters” (economic cluster departments, welfare and so on) to provide or source training relevant to the cluster. Individual proposals to PSETA for grant support will be discouraged unless the department can provide a sound reason for a stand-alone project. When departments approach PSETA with a proposal for funding, PSETA will first check that they have engaged with the champion department (DPSA, National Treasury, DPME, for example) to ensure their training plans are in line with national approaches to developing these skills; second, PSETA will help departments find and collaborate with other public service organisations looking to develop the same skills; and third, assist with matching departments to the most appropriate training providers (with a focus on public sector training institutions – universities, TVET colleges etc). Departments will be encouraged to co-fund these programmes to improve the chances of senior level departmental support for the programmes.

PSETA will assist departments in developing these kinds of strategic proposals. *Through the strategic allocation of its discretionary grants and working with departments to build these proposals, PSETA thus aims to support a “change management” process in the skills development sector – moving departments away from the current ad-hoc approach to training.*

An example of such a proposal is a project PSETA is developing with the Gauteng Office of the Premier. The Premier’s Office is looking to support improvements in front line service delivery across a number of sites in the province. A proposal is being put together to develop capacity in administration, systems development and management. Capacity building activities will be phased in over a number of years – with the first year being used as a pilot to test the possibilities of rolling out the training to other parts of the province. The project is to be co-funded by PSETA and Gauteng, and PSETA is facilitating discussions between Gauteng and public sector training institutions.

Regarding PSETA’s work with the various champions of the competencies outlined above: where the champion departments have already developed a strong analysis of the approaches needed to support the development of these skills, PSETA is using this work as a guide for its own activities. Much work in this regard has already been done in the case of SCM, spearhead by the OCPO; in the area of support to SIPS, spearheaded by Treasury; and in support for monitoring and evaluation by DPME. Further analysis is needed about how to support the development of operationally inclined management, and HRM and HRD. DPSA is currently finalising its strategy for supporting HRD in the public service over the next five years.

In the section below we provide detail on how development of each of the priority competencies outlined above will be supported.

Support to technical and professional skills, with a focus on SIPS:

- Support from PSETA to the professional and technical skills will be delivered through targeted support to SIPS i.e. government's strategic infrastructure projects. As noted, whilst the responsibility of supporting increased supply of personnel lies primarily with other SETAs, PSETA has identified two primary roles it can play 1) support to the IDMS training programme 2) PSETA will promote the public service as a career of choice to professionals identified as important for improving infrastructure development and management.
- PSETA is part of an interdepartmental task force (involving DPSA, COGTA, LGSETA, Offices of the Premier etc.) established to work with the departments affected by the roll out of SIPS to help them identify what skills development initiatives are needed, and how to access these.
- PSETA will also support training of personnel on the IDMS. The IDMS aims to enhance the competencies of personnel responsible for managing the planning, construction, operation, maintenance and asset management of public infrastructure. A component of training that can be delivered through e-learning – for example, training personnel on the new infrastructure procurement standards, on how to use the IDMS system and so forth. PSETA will work with relevant government bodies to support the development of this training material (further details on PSETA's work in the area of e-learning are provided below).

Support to operationally skilled management:

- As noted in Chapter Three, there is no shortage of people with degrees in public administration and management. However, there is a very large need for interventions to develop more competent and in particular, operationally skilled, managers (see the NDP, 2012). The development of management skill happens over relatively long periods of time, often through the mentorship of more senior staff. It is fundamentally supported by stability in the organisation – as was detailed in Chapter Two. The length of time needed to rectify skills deficits in this area is therefore substantial, as is the scale of support needed. Nonetheless, developing improved basic administrative skills of managers can be fairly cost effectively and quickly addressed through e-learning.
- Interviews in preparation for this SSP with a number of PSETA departments point to the need to improve the curriculum content and relevance of public administration courses to prepare students appropriately for work in the public service. This year PSETA will be engaging with schools of public administration in South Africa to support the development of stronger and more relevant curricula for managers in the public service. The idea of a round table forum has already been raised with the heads of some of the public administration schools.
- Further dialogue is needed with partners such as DPSA and DPME to identify the range of interventions required to support operational capacity for public service managers. The DPSA has recently issued a directive that states that members of the SMS must undergo a minimum of 18 days of training over a specified period. PSETA will engage with DPSA about the potential form of this training, linking the discussions on the curriculum (above), with DPSA's plans for SMS training.
- PSETA will also be supporting the provision of training on generic administrative skills for managers through e-learning.

- PSETA has a role to play in sharing lessons of successful approaches to developing operationally inclined managers – through sharing of case studies, dialogues and study tours (discussions in this regard have taken place with Home Affairs). This could take place through a variety of informal and non-formal interventions, including compiling a set of Home Affairs resources onto a CD and sharing them; “study tours” by other departments to Home Affairs; and/or a workshop at which Home Affairs shares its approach and resources with other departments at senior management level.

Support for SCM and contract management:

- National Treasury’s OCPO has identified that improving technical skill in SCM and contract management will require more substantial training for managers and new recruits to the public service on specific legislation, regulations and processes of procurement in the South African public sector; the development of specific courses and programmes in the tertiary sector and in the National School of Government on procurement, including courses on specifications development, contract management and so forth; support for the recruitment of further technical skills to ensure specifications are correctly developed, and the use of technical skills and subject matter expertise is appropriately incorporated into the procurement process (see the section above on professional and technical skill); regarding procurement under SIPs: there is a need for training that provides information about the new IDMS, and so forth.
- We have already outlined PSETA’s work to support training on the IDMS above, which will include training on the new infrastructure procurement standards.
- With regards to PSETA specifically, the OCPO also proposes that PSETA coordinates ETD interventions nationally, advocates for HRD in the public sector (essential for improving the state’s ability to recruit, retain and mentor technical skill) and funds priority skills development interventions.
- Priority skills development interventions will be funded through PSETA’s discretionary grants (lead by the approach outlined in the introduction to this section on Recommended Actions).
- Last, regarding the OCPO’s recommendation that PSETA can play a role in ‘advocating for HRD in the public sector’ - this is included as part of PSETA’s focus (see PSETA focus on HRM and HRD).

Support for HRM and HRD:

- Interventions needed to support the development of HRM and HRD include (but are not limited to) an increased supply of HR professionals to the public service; benchmarking of public service HRM and HRD practitioners against established professional standards; advocacy for the placement of HRD managers at a more senior strategic level in all departments (some departments are already doing this); and efforts to support the status of the professions in the public service and in the labour market more broadly. As mentioned, DPSA is in the process of developing a new strategy to support HRD in the public service. Addressing the issues just outlined (especially the improved status and supply of HR professionals) will take a good deal of time and political commitment to address. PSETA will continue to advocate for the importance of improved HRM and HRD in the public service.
- In the area of HRD, there are a number of priorities that PSETA can support that can assist with improving HRD competencies in the short to medium term: HRD practitioners

need improved skills in supporting workplace-based training and in supporting the further implementation of e-learning. Further details are provided below.

Support for developing capacity to provide training through e-learning:

- The expansion of the state's capacity to delivery training through e-learning will enable more economical provision of training, therefore allowing for an increased scale of provision. DPSA's HR Connect survey (2012) identified a set of generic skills (such as computer skills, basic statistical skills, minute taking, chairing meetings etc.) in which tens of thousands of public servants have indicated they need development. Training in these areas, can in many cases, be delivered through e-learning. Further, training on new public sector wide systems (such as the IDMS), and on new legislation and standards, can also be provided (or a component of this training provided) through e-learning.
- New capacity will be required for the public service to deliver good quality e-learning; this includes both skills development for programme developers, as well as for HRD staff based in departments who will need to understand how to promote and manage e-learning within their workplaces.
- PSETA is working with the National School of Government and other state academies to develop this capacity. As mentioned, the School has a small team working on the development of IT platforms and curriculum content for e-learning.
- PSETA will be hosting workshops with its departments to introduce the concept of e-learning and to outline the kind of resources that departments will need to provide these forms of training.
- PSETA has allocated funds to support the development of curriculum content, for training programmers and for training HRD personnel.
- Personnel in the sector state academies will be targeted for training to develop coursed that can then be shared with other state academies and departments. For example, StatsSA will be supported to develop courses on basic statistics.

Support to workplace-based training of interns and learners, including bridging into work:

- The need to build the state's capacity to act as a training space has been outlined in Chapter Three – departments are directed to provide work experience for learners (from TVET colleges etc.) and to provide internships for potential staff and unemployed graduates.
- Here too, improving this capacity across the public service is a long-term goal: it requires improving the capacity and stability of managers to enable mentorship and other forms of workplace-based training (see above). In the medium term, PSETA has identified the following areas in which it can support workplace-based training and 'bridging-into-work':
- PSETA aims to improve TVET's colleagues understanding of the public service workplace environment, and to support colleges in providing guidance to departments on what forms of training are needed in the workplace, how learners can be assessed by their mentors or managers and so forth. PSETA has developed a strategy to expose college lecturers to public service workplaces and has begun a process of facilitating discussing between Offices of the Premiers and relevant Universities of Technology and TVET colleges. PSETA further aims to host workshops and study tours to facilitate this.

- PSETA will develop guidelines and workshops for departments on how to run successful internship programmes, and how to better align internship and recruitment strategies, drawing on the experience of departments who have developed substantive programmes. These departments include the National and Limpopo Treasuries (Limpopo drew from, and adapted, the National Treasury model to develop a two year formal internship programme). DIRCO's cadet programme provides interns with the opportunities for international exposure so key to international relations. The Green Skills Sector has developed successful internship programmes under Groen Sebenza, a Presidential Jobs Fund project.
- As mentioned in Chapter Four, PSETA is already funding the training of managers wishing to develop their capacity to mentor staff.

PSETA, August 2015

References

- Allais, S. 2005. What is Matric? A Response to Foxcroft and Stumpf. Matric: what is to be done? Seminar Papers and Presentations. Pretoria, 23 June, Centre for Higher Education Transformation and Umalusi.
- Brunette, R. et al. 2014. The Contract State: Outsourcing and Decentralisation in Contemporary South Africa, Study funded by the Ford Foundation, Public Affairs Research Institute, Johannesburg, May.
- Chipkin, I. 2011. Beyond the Popular Discourse: Capacity Constraints in the Public Sector. PARI Short Essay, No. 3, Public Affairs Research Institute (PARI), Johannesburg, May.
- Construction Education and Training Authority. 2010. Sector Skills Plan. Pretoria: CETA.
- Council on Higher Education. 2013. A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure, August 2013.
- Council on Higher Education. 2009. The State of Higher Education in South Africa, A report of the CHE Advice and Monitoring Directorate, Higher Education Monitor No. 8.
- Dagut, S. 2007. The South African National Treasury, the Matthew Effect and some tentative thoughts about civil service reform in Africa. Unpublished term paper, Woodrow Wilson School of Public and International Affairs, Princeton University.
- Department of Basic Education. 2015. Education Statistics in South Africa 2013, March 2015, Pretoria.
- Department of Higher Education and Training. 2015. Statistics on Post-School Education and Training in South Africa: 2013. Pretoria: DHET.
- Department of Higher Education and Training. 2014. Call for Comments on the National Scarce Skills List: Top 100 Occupations in Demand, Notice 380 of 2014.
- Department of Higher Education and Training. Undated. National Skills Development Strategy III. Pretoria: DHET.
- Department of Performance Monitoring and Evaluation. 2013. The State of Management Practices in the Public Service. Pretoria: DPME.
- Department of Public Service and Administration. 2013. Achieving a Skilled and Capable Workforce for an Efficient, Effective, Professional and Development-Oriented State: A Coordinated Approach, Ministry for Public Service and Administration Report to the Human Resource Development Council of South Africa, March 2013. Pretoria: DPSA.
- Cribb, J, Disney, R. and Sibieta, L. 2014. The Public Sector Workforce: Past, Present and Future. IFS Briefing Note BN145, Institute for Fiscal Studies, London, United Kingdom.
- Gustafsson, M. 2011. The when and how of leaving school: the policy implications of new evidence on secondary schooling in South Africa, Stellenbosch Economic Working Papers: 09/11, Stellenbosch University, Stellenbosch.
- Human Resource Development Council of South Africa. 2014. National Integrated Human Resource Development Plan 2014-2018. Pretoria: Human Resource Development Council of South Africa.
- Human Resource Development Council of South Africa. 2009. Human Resource Development Strategy for South Africa, 2010 – 2030, March 2009. Pretoria: Human Resource Development Council of South Africa.
- Human Resource Development Council of South Africa website: <http://www.hrdcsa.org.za/>, accessed 7 June 2013.
- Huluman, S. 2011. The Role of PSETA, Presentation to the Public Sector Trainers' Forum Conference, Bloemfontein, 27 September 2011.

- Kuye, J.O., 2006. "Public Sector Reforms: The Case for South Africa – 1994-2005" in *Journal of Public Administration*, 41(2.2).
- Lotz-Sisitka, H., Ramsurup, P., Gumede, M., Togo, M. and Rosenberg, E. 2013. 'Green Skills Development in South Africa: System perspectives for the shaping of learning pathway possibilities for sustainable development, the green economy and climate resilient development', October.
- Meny-Gibert, 2012. Marking time: Inefficiencies in the schooling system and possible responses. PARI Short Essays, Number 4.
- Mkhize, S. V. 2011. Case study: DHA [Home Affairs] ID turnaround process, Presentation to the Public Sector Trainers' Forum Conference, Bloemfontein, 27 September 2011.
- Morgan, N. 2014. Where have all the people gone? Exploring water and sanitation delivery in South Africa. Study funded by the Open Society Foundation for South Africa, Public Affairs Research Institute, Johannesburg, May.
- National Planning Commission. 2012. National Development Plan – 2013. Pretoria: National Planning Commission.
- National Treasury. 2015. Estimates of National Expenditure. National Treasury, Pretoria.
- National Treasury. 2014. Capacity Development Strategy for Public Financial Management. National Treasury, March.
- National Treasury, Personal Communication, 19 August 2013.
- Pillay, P., Juan, A. and Twalo. T. 2011. Measuring impact assessment of skills development on service delivery in government departments, study commissioned by the Department of Labour, October 2011. Pretoria: Human Sciences Research Council.
- Public Service Commission. 2011. Assessment of the State of Human Resource Management in the Public Service. Pretoria: PSC.
- Public Service Commission. 2008. The Turn-over Rate of Heads of Department and its Implications for the Public Service. Pretoria: PSC.
- Public Service Sector Education and Training Authority. 2014. Annual Report, 2013/14. Pretoria: PSETA.
- Public Service Sector Education and Training Authority. 2013. Concept paper for PSETA: A framework for guiding skills development in the public service, Public Affairs Research Institute, University of the Witwatersrand, June 2013.
- Public Service Sector Education and Training Authority. 2011. The PSETA Sector Skills Plan Update 2012-16, November 2011.
- Taylor, N., Mabogoane, T. and Akoobhai, B. 2011. Service Delivery Research Project: The School Sector, report submitted to the Office of the Presidency, May. Johannesburg: JET Education Services.
- Technical Assistance Unit of the National Treasury. 2012. Diagnostic Research Report on Corruption, Non-Compliance and Weak Organisations. Study undertaken by the Public Affairs Research Institute (PARI) for the Technical Assistance Unit, Pretoria.
- Van der Berg, S., Burger, K., Burger, R., deVos, M., Gustafsson, M., Moses, E., Sheperd, D., Spaull, N., Taylor, S., van Brokhuizen, H. and von Fintel, D. 2011. Low quality education as a poverty trap, Research Report, March. Stellenbosch: Social Policy Research Group, Stellenbosch University.
- Yuba, M. 2013. The role of the National Archives and Records Service of South Africa in the young democracy. Masters thesis, Graduate School of Public and Development Management, University of the Witwatersrand.

Appendix One: Description of the Major Occupational Classification/Groups used in PERSAL

(i) *Elementary occupations*: Elementary occupations are normally responsible for routine, often manual, tasks. With few exceptions only limited personal initiative and judgement are required. The main tasks consist of the delivery of messages/goods, cleaning, washing, pressing, property watching and working as labourers.

(ii) *Administrative Office Workers*: This group comprises two clusters of occupations. The first cluster is referred to as clerks and related personnel and includes occupations whose main tasks require the knowledge and experience necessary to organise, store, compare and retrieve information. The main tasks consist of performing secretarial duties, operating word processors and other office machines, recording and computing numerical data and performing a number of customer-oriented clerical duties. The second cluster is referred to as administrative policy and related personnel and includes occupations whose main tasks are to formulate and advise on government policies of an administrative nature, formulate/administer laws, rules and regulations directly associated with the policies and legislation of the employing institution. Employees in this category are also responsible for inspections to ensure that regulations are complied with.

(iii) *Professionals and Managers*: This group includes occupations whose main tasks require a high level of professional knowledge and experience in the fields of physical and life sciences, or social sciences and humanities. The main tasks consist of increasing the existing stock of knowledge, applying scientific and artistic concepts and theories to the solution of problems, about the foregoing in a systematic manner. This group also includes various levels of managers. The lowest level of managers' main tasks usually includes planning, directing and coordinating activities of components in a department, directing daily operations, overseeing the selection, training and performance of staff, liaising with managers of other components and in other departments and representing the department in its dealings with other parts of the organisation or with outside bodies. The second level of managers' main tasks usually include determining and formulating policies, planning, directing and co-ordinating the general functioning of directorates/chief directorates (or the equivalent thereof) with the help of other managers under her/his control. The highest level of managers in this major group are heads of departments/provincial departments who are accountable for the effective and efficient management of departments/provincial departments/organisational components indicated in Schedule 1, 2 and 3 of the Public Service Act, 1994.

(iv) *Technicians and Associated Professionals*: This group includes occupations whose main tasks require technical knowledge and experience in one or more fields of physical and life sciences, or social sciences and humanities. The main tasks consist of carrying out technical work connected with the application of concepts and operational methods in the above-mentioned fields.

(v) *Service Workers*: Service workers provide personal and protective services related to housekeeping, catering, personal care, social auxiliary services, protection against fire and unlawful acts, etc. Tasks performed include housekeeping, food preparation, child care, care for persons at homes or institutions, personal care, protection of individuals and property against fire and unlawful acts.

(vi) Social, Natural, Technical and Medical Sciences Supplementary and Support Personnel: Personnel in this major group normally apply their knowledge and skills as part of supplementary and support functions directly associated with Professionals and Technicians. They assist with supporting services like operating specialised equipment/make preparations for specialised tasks to be performed by Professionals/Technicians. They may also render supplementary functions in e.g. the social services fields.

(vii) Craft and Related Trades Workers: Craft and related trades workers apply their knowledge and skills in the fields of construction, working with metals, erecting structures, maintaining and repairing machinery, printing work and producing handicraft goods. The work is carried out by using equipment/tools to reduce the physical effort and time required for specific tasks, as well as to improve the quality of the products. An understanding of the various stages of the production processes, the materials and tools used and the nature and purpose of the final product is required. .

(viii) Drivers, Operators and Ships' Crew: Personnel in this major group operate and monitor machinery and equipment and execute deck duties on board vessels. They can also be responsible for the driving of vehicles. The work mainly requires experience and understanding of machinery, equipment, vehicles and vessels. Supervision of other workers may be required.

(ix) National Security Services and Custodian Personnel: Included in this major group are members of the army, navy, air force, police and correctional services. No specific skill level has been linked to this major group.

(x) Information Technology Personnel: Information Technology Personnel conduct research, plan, develop and improve computer based information systems, software and related concepts as well as maintain management systems such as databases to ensure integrity and security of data. They also provide assistance to users of micro-computers and standard software packages, control and operate computers and peripheral equipment and carry out programming tasks (complexity may vary) related with the installation and maintenance of computer hardware and software. In some cases they may also receive guidance from managers.

Appendix Two: Note on data sources

Projecting the demand and supply of labour and skill in any sector is a difficult task, but particularly so in the case of the public service. This is partly because of the breadth of functions it performs. It is also because traditional indicators of scarce skill used in the private sector do not always 'signal' scarce skills as effectively in the case of the public sector. For example, salaries in the public sector are 'graded', with limited room for negotiation on salaries between an employer and employee. High vacancy rates in a particular occupation in a department can point to the fact that the department has not adjusted its formal organisational structure to reflect the fact that it is no longer hiring personnel in that occupational category, or it could reflect that the department has used its budget on other line items and cannot afford to hire more staff in a particular occupation.

Another challenge relates to the quality of the current data on the public service in South Africa. According to the DPSA, a recent project aimed at improving the quality of data capturing into the Persal system has improved the reliability of Persal data (interview with the DPSA, July 2013), though more work still needs to be done to improve the Persal database. Old occupational categories no longer used by HR could be removed from the system, the data on public servants' qualifications still needs improvement, as does data used to compute vacancy and especially turnover rates.

We should also note that the Persal database does not capture information on the majority of state owned entities. Further, Persal does not include data on the legislatures and on national parliament. Aggregated data on employment statistics and trends in the public service does not exist, in part because public entities use differing data management systems. StatsSA's Quarterly Labour Force Survey has some data on the basic profile of employees in state owned enterprises – we have included this data where relevant in the SSP.

The accuracy of the WSP data, as mentioned in Chapter One, is also uneven. There is work currently underway in improving WSP data capture. The quality of WSP data still remains poor, however, and the WSPs are, for many departments, simply a frustrating compliance requirement. PSETA would strongly support an improvement in the HR data systems and data capturing and has provided specific recommendations in this regard to DHET and DPSA.

A further challenge is that there is uneven capacity in the HRD functions across many departments in the Public Service (DPSA, 2013). It is not simply the case that the quality of data provided in reporting templates such as the WSPs are poor: the very ability to identify where scarce skills and training is most needed is poor in many departments (PSETA, 2013). Not all capacity constraints are as a result of a 'skills issue' (vacancies or insufficiently trained staff). Problems identified by senior management as 'an insufficient number of people to do the job' may, for example, mask deeper problems of the macro-organisation or structure of the department or of how to effectively motivate and manage performance of employees. In this context, it becomes even more important to draw on independent research on the capabilities that have driven organisational performance in the South African public sector, and not simply to rely on Persal data or on WSPs. This SSP thus draws on a range of datasets and studies in projecting the nature of skills demand in the sector, triangulating quantitative data from Persal with qualitative studies. It also draws on stakeholder engagement undertaken in preparation for this and previous SSPs.