

### **DELIVERY AGREEMENT 5**

# A skilled and capable workforce to support an inclusive growth path

Delivery Agreement 5 consists of 3 separate delivery agreements

Agreement 1 covers Output 5.1
Agreement 2 covers Outputs 5.2 and 5.3
Agreement 3 covers Outputs 5.4 and 5.5

#### Contents

### **Delivery Agreement 1**

	NTRODUCTION	e
	. HIGH LEVEL PROBLEM STATEMENT	7
	2. IDENTIFICATION OF DELIVERY PARTNERS	7
	3. LINKING OUTPUTS TO OUTCOME 5: A skilled and capable workforce to support an inclusive grow path	
	3.1 Output 1: ESTABLISH a credible insitutional mechanism for skills planning	7
	I. ACTIONS NEEDED TO ACHIEVE EACH OUTPUT	<u>S</u>
	4.1 Output 1: ESTABLISH a credible insitutional mechanism for skills planning	<u>S</u>
	5. INDICATORS, BASELINES AND TARGETS FOR OUTCOME	10
	S. SYNOPSIS OF KEY ACTIVITIES	11
	7. RISKS, CONSTRAINTS AND MITIGATION STRATEGIES	13
	B. GOVERNANCE AND REPORTING ARRANGEMENTS	13
	9. APPENDIX A: RESULTS CHAIN	14
	O. APPENDIX B: HIGH LEVEL IMPLEMENTATION PLAN BY SUB-OUTPUT	14
	1. SIGNATORIES	14
D	livery Agreement 2	
	INTRODUCTION	16
	2. HIGH LEVEL PROBLEM STATEMENT	16
	3. IDENTIFICATION OF DELIVERY PARTNERS	17
	I. LINKING OUTPUTS TO OUTCOME 5	18
	0.1 Output 2: Increase access to programmes leading to intermediate and high level learning	18

(	+.Z expan	Output 3: Increase access to occupationally-directed programmes in needed areas and there and the availability of intermediate level skills (with special focus on artisan skills)	•
5.	OU <sup>-</sup>	TPUT-BASED ANALYSIS	19
!	5.1	Output 2: increase access to programmes leading to intermediate and high level learning	19
	5.2 expan	Output 3: increase access to occupationally-directed programmes in needed areas and there and the availablity of intermediate level skills (with special focus on artisan skills)	-
	5.2.	.2 Sub-output 2: Produce at least 10 000 artisans per annum by 2014	30
	5.2. leve	.3 Sub-output 3: Put in place measures to improve the trade test pass rate from its 2009 el of 46% to 60% by 2014	32
(	11 6	NDICATORS, BASELINES AND TARGETS FOR OUTCOME	36
-	<b>7</b> S	YNOPSIS OF KEY ACTIVITIES	36
8	3 R	RISKS, CONSTRAINTS AND MITIGATION STRATEGIES	36
9	9 G	GOVERNANCE AND REPORTING ARRANGEMENTS	36
:	10. AP	PPENDIX A: RESULTS CHAIN	36
	11. AP	PPENDIX B: HIGH LEVEL IMPLEMENTATION PLAN BY SUB-OUTPUTS	37
:	12. SI	GNATORIES	37
De	elive	ry Agreement 3	
ı	NTRC	DDUCTION	39
:	1. HIG	SH LEVEL PROBLEM STATEMENT	39
:	2. IDE	NTIFICATION OF DELIVERY PARTNERS	39
3	3: LIN	KING OUTPUTS TO OUTCOME 5	40
	3.4	Output 4: To increase access to high level occupationally directed programmes in needed area	
		Output 5: research, development and innovation in human capital for a growing knowledge nomy	42
4	4. AC1	TIONS NEEDED TO ACHIEVE EACH OUTPUT	42
	4.1	Output 4: Increase access to high level occupationally-directed programmes in needed areas.	42

	4.2 Output 5: research, development and innovation in human capital for a growing knowledge	
	economy	.40
5	, INDICATORS, BASELINES AND TARGETS FOR OUTCOME	.50
6	. SYNOPSIS OF KEY ACTIVITIES	.50
7	. RISKS, CONSTRAINTS AND MITIGATION STRATEGIES	.50
8	. APPENDIX A: RESULTS CHAIN	.51
9	. APPENDIX B: HIGH LEVEL IMPLEMENTATION PLAN BY SUB-OUTPUT	.51
1	0. SIGNATORIES	.51



### **DELIVERY AGREEMENT 1**

# For Output 5.1 – Establish a credible institutional mechanism for skills planning

between

the

Minister of Higher Education and Training

and

Minister for Public Service and Administration

Minister of Labour

Minister of Home Affairs

Minister for Economic Development

Minister of Rural Development and Land Reform

Minister of Finance

Minister of Trade and Industry

Minister of Science and Technology

Minister of Basic Education

Minister for Performance Monitoring and Evaluation

Minister for the National Planning Commission

MECs for Education

#### INTRODUCTION

Government has agreed on 12 outcomes as a key focus of work between now and 2014. Each outcome has a limited number of measurable outputs with indicators and targets. Each indicator is linked to a set of activities that will help achieve the targets and contribute to the outcome. Each of the 12 outcomes has a delivery agreement, which in most cases, involves all spheres of government and a range of partners outside government. Combined, these agreements reflect government's delivery and implementation plans for its foremost priorities.

This delivery agreement is a negotiated charter which reflects the commitment of the key partners involved in the direct delivery process, to working together to undertake activities effectively and on time to produce the mutually agreed-upon outputs which in turn will contribute to achieving Outcome 5, namely: A skilled and capable workforce to support an inclusive growth path.

This delivery agreement provides the detailed outputs, targets, indicators and key activities to achieve Outcome 5.1, identifies the required inputs and clarifies the roles and responsibilities of the various delivery partners. It spells out who will do what, by when and with what resources. The outcomes apply to the whole of government and are long term. While the delivery agreement may contain longer term outputs and targets, it also includes outputs and associated targets that are realisable in the next 4 years.

It also considers other critical factors impacting on the achievement of Outcome 5.1, such as the legislative and regulatory regime, the institutional environment and decision-making processes and rights, the resources needed and the re-allocation of resources where appropriate.

This Delivery Agreement will be reviewed annually in the light of learning by doing and monitoring and evaluation (M&E) findings. Accordingly it will be refined over time and become more inclusive of the relevant delivery partners.

This delivery agreement deals specifically with output 5.1, namely: *Establish a credible institutional mechanism for skills planning.* This output will be achieved via the development of frameworks for standardization and cooperation regarding information on the supply and demand of skills in the country, and the development of systems and system interfaces.

There are 3 sub-outputs that have been agreed upon during the consultation phases:

- Sub-output 5.1.1: Develop standardised frameworks for the assessment of skills supply, shortages and vacancies in the country;
- Sub-output 5.1.2: Develop mechanisms to interface operational systems;
- Sub-output 5.1.3: Develop strategic management information systems.

The Department of Higher Education and Training is also responsible for a further 4 outputs which will be covered in separate delivery agreements.

#### 1. HIGH LEVEL PROBLEM STATEMENT

There is currently no institutional mechanism that provides credible information and analysis in regards to both the supply (availability and supply pipeline) and demand for skills. While there are a number of disparate information databases and research initiatives, there is a lack of a standardised framework for the determination of skills supply, shortages and vacancies and there is no integrated information system for skills supply and demand across government. The Human Resource Development Strategy of South Africa (HRDSA) and the erstwhile JIPSA have identified that access to relevant and reliable information is an obstacle to the supply of relevant skills for growing the economy. There is therefore a need for an integrated standardised framework and information system for collating the information and for reporting on skills supply and demand in the country.

#### 2. IDENTIFICATION OF DELIVERY PARTNERS

Due to the fact that information relating to the supply and demand of skills currently rests in a number of separate databases and is informed by various government strategies, the following key partners have been identified for setting up the mechanism for skills planning.

Minister of Basic Education
Minister for Economic Development
Minister of Finance
Minister of Home Affairs
Minister of Labour
Minister for National Planning Commission
Minister for Performance Monitoring and Evaluation
Minister for Public Service and Administration
Minister of Rural Development and Land Reform
Minister of Science and Technology
Minister of Trade and Industry
MECs for Education

3. LINKING OUTPUTS TO OUTCOME 5: A skilled and capable workforce to support an inclusive growth path

#### 3.1 OUTPUT 1: ESTABLISH A CREDIBLE INSITUTIONAL MECHANISM FOR SKILLS PLANNING

It is necessary to have reliable information on the availability of and need for skills in the country in order to ensure effective and efficient planning for an inclusive growth path.

With regards to output 5.1 there is currently no fully integrated institutional mechanism that provides credible information and analysis in regards to both the supply (including availability and in-pipeline production of skills) and the demand for skills. The erstwhile Joint Initiative for Priority Skills Acquisition

(JIPSA) identified the lack of proper information on the supply (both availability and in pipeline productions of skills) and demand for skills as a major blockage to the adequate supply of relevant skills in the country. The working document of the Human Resource Development Strategy of South Africa – identified the need for credible information as a prerequisite for effective and efficient planning of skills provision. JIPSA also identified the updating and modernization of the South African Qualifications Authority's national learner record database (NLRD) as a priority. The NLRD must provide the learning record of every citizen and workplace in the country. The Human Resource Development Council, which is chaired by the Deputy President of the Republic of South Africa, has also agreed to take forward the outstanding work of JIPSA.

There are a number of disparate information sources regarding the supply (both availability and in pipeline productions of skills) and demand for skills that are neither coordinated nor integrated. One of the main reasons for the blockage on integrated supply data, was the lack of coordination between education and training functions in the country, as well as a focus on basic education by the erstwhile Department of Education. The allocation of the skills functions to the Minister of Higher Education and Training and the separation of the Basic Education functions from post school education allows, for the first time, an opportunity to interface, co-ordinate and integrate the supply side data under one Ministry. The situation as it existed before, led to crisis interventions because of the actual shortage of skills versus the responsiveness of the education and training systems to meet the demand.

The demand side information is also not fully reliable, especially the previous reliance on the National Scarce Skills List, which lacked credibility. The demand side information also needs to be standardised and coordinated into an integrated mechanism.

Within the various policies and legislation there exists a mandate for information collections, yet even within the same system there has been lack of policy, norms, standards and legislation for the interfacing, integration, coordination and standardization of information provision. In order to ensure the successful collaboration, integration and coordination of operational data systems, the Department of Higher Education will need to ensure firstly, that it integrates and interfaces all the disparate systems within its own control, and thereafter it will have to develop, after consultation with key partners, a standardised framework for information provision and utilization across the supply and demand domains. Finally a system wide mechanism will need to be established so that effective skills planning across the country can be undertaken.

In addition to the coordination of the operational data systems under the control of the Department of Higher Education and Training, interfacing with operational information from other Departments such as Labour and Home Affairs, with regard to unit record information on the surplus and deficit of skills in the job market and the net inflow or outflow of skills in the country, is required.

A research capability to harness the aggregated data within StatsSA and other research agencies is needed and the provision of information to learners about learning and work opportunities is an imperative.

#### 4.1 OUTPUT 1: ESTABLISH A CREDIBLE INSITUTIONAL MECHANISM FOR SKILLS PLANNING

#### What will need to be done differently?

Consultation meetings will be held with key managers within the DHET and its entities to find ways and means of interfacing or integrating databases of the Higher Education Management Information System (HEMIS), Further Education and Training Information System (FETMIS), Adult Education and Training Information System (AETIS), Sector Education and Training Authorities (SETAs), South African Qualifications Authority (SAQA), General and Further Education and Training Quality Council (UMALUSI), Quality Council to Trades and Occupations (QCTO) and Higher Education Quality Committee (HEQC). While some of these systems are unit record based systems, others still need to be developed as unit record based systems. Consultations will also be undertaken with selected Universities, Colleges and SETAs. In addition, consultation and cooperation needs to take place between the DHET and other government departments to create a standardised framework for the provision of information on skills demand in the country. A mechanism for skills planning can only be developed via collaboration with a number of key delivery partners.

#### **Evaluation of the legislative environment**

The Higher Education and Training Act, The Further Education and Training Act, The Adult Basic Education and Training Act, The Skills Development Act, the National Qualifications Act, the General and Further Education and Training Act, the National Student Financial Aid Scheme Act and the National Education Policy Act all point to the need for information to some extent. The Education Information Policy (inherited from the Department of Education) will have to be amended to include the Higher Education Act, the Skills Development Act, the NQF and the General and Further Education and Training Act as part of the policy and to exclude the South African Schools Act. The amended policy will also look at interfacing, integrating and coordinating the supply, use and management of information so as to assist in the planning of skills supply and determining the demand for skills. Where there are gaps in the legislation regarding information provision this will be attended to.

#### Evaluation of the existing regulatory framework

Once the policy and legislative need has been identified, the need for regulation of the collection, use, interfacing, integrating, norms, standards, administration and management of information collection, storage and usage would be required. Standardised frameworks for the provision of information on skills supply, shortages and vacancies in the country will be developed.

#### **Evaluate the existing institutional arrangements**

Other than the Heads of Education Committee sub-committee on Information (dealing with Further Education and Training and Adult Basic Education and Training Information), there is currently no institutional arrangement for information collaboration and the interfacing of data systems, both within the Department of Education and its entities and institutions, as well as with other government entities.

There is also a need to ensure that all institutions and entities reporting to the DHET are brought together into a permanent forum to coordinate and improve on information systems and to co-ordinate interdepartmental collaboration in the management of information.

#### Evaluate the management systems, processes and skills

The management systems and processes are currently in place to achieve the output as it relates to the institutions and entities of the DHET. However, in regards to the collaboration with Statssa, DoL, DHA, DTI, DST, DBE, DPSA, DED and others, a specialist information forum needs to be established. The delivery forum will become the permanent implementation forum. There is also a need for high level technical IT skills to achieve sub-outputs 2 and 3, which the State Information Technology Agency will provide.

#### Funding framework

The DHET has access to funds from the National Skills Fund for the establishment of the strategic intelligence capability (R75 million) and for the career and vocational guidance information system. (R100 million) For the interfacing with the national learner records database (NLRD) of SAQA, funds can be made available from the National Skills Fund. The earmarked EMIS funds made available to the Department of Education and to Provinces as voted funds, are currently being used for the development of the Learner Unit Record Information and Tracking System for schools. Once this system is fully implemented, funds will have to be allocated to the development of the Further Education and Training System Information Systems and the Adult Basic Education and Training Information Systems. Thus the total funds currently available for this delivery agreement is R176 million, with an additional R200 million to be consulted with National Treasury and an indeterminate amount that must still be established.

#### 5. INDICATORS, BASELINES AND TARGETS FOR OUTCOME

Currently there is no integrated information system in the country that provides data on the demand and supply of skills. There are disparate databases that collect information on either the supply or demand of skills, which need to be interfaced or integrated. In order to do this, standardised frameworks for cooperation will need to be established. There is also a limited capability accessible to government for strategic intelligence with regards to analysis, surveys, investigations, studies and research into the demand and supply of skills and labour market analysis and there is no comprehensive capability for labour market forecasting. For these reasons, Output 5.1 will be achieved via the development of frameworks for the standardization of skills supply and demand information, and the development of systems and system interfaces to supply the information and thereby create a credible mechanism for skills planning.

There are 3 sub-outputs (each with a set of indicators) that have been agreed upon for output 5.1:

- Sub-output 5.1.1: Develop standardised frameworks for the assessment of skills supply, shortages and vacancies in the country (by March 2012)
  - A standardised framework for providing information on current skills provisioning and attainment;
  - A standardised framework for access to information on current skills demand and projected skills demand;
  - A standardised framework for information on skills usage and inflow and outflow of skills in the country;
  - A standardised framework for cooperation on the provision of career guidance and information services in the country.
- Sub-output 5.1.2: Develop mechanisms to interface operational systems (by March 2013)
  - Management information system interface of all administrative databases within the DHET (and its entities) for the supply and attainment of skills;
  - Interfaces with databases recording vacancies in the public services and the country as a whole and datasets indicating future skills demand;
  - Interfaces with datasets on skills usage and the inflow and outflow of skills future skills demand;
  - Interfaces with databases recording spatial information for the location of skills supply and demand in the country.
- Sub-output 5.1.3: Develop strategic management information systems (by March 2014)
  - A strategic intelligence capability to undertake analyses, surveys, investigations, studies and research into the supply and demand for skills;
  - A comprehensive career guidance and career information dissemination and collection system
  - A business intelligence information reporting system that Interfaces all sources of information relating to the stock, supply and demand of skills

#### 6. SYNOPSIS OF KEY ACTIVITIES

(See Appendix A for details of key activities, key delivery partners and responsibilities per activity)

The key activities and key partner responsibilities were fully consulted with the delivery partners at the implementation forum meetings of 16<sup>th</sup> August and 17<sup>th</sup> September and agreed to. A wider forum was also consulted at the Skills Summit on 9<sup>th</sup> to 10<sup>th</sup> September 2010.

A separate meeting was held with SITA managers on 23rd September to discuss the role and engagement of SITA in providing support and high level technical skills to deliver the required sub-outputs.

#### Output 5.1 Establish a credible institutional mechanism for skills planning

### SUB-OUTPUT 1: Develop standardised frameworks for the assessment of skills supply, shortages and vacancies in the country

The key activities for the development of the 4 standardised frameworks are:

- a. Identify the core indicators for reporting on the supply and demand for skills
- b. Identify the cycles for the provision of information
- c. Identify the responsible entities
- d. Identify the legislative responsibility
- e. Develop the framework
- f. Consult with the delivery team on the framework
- g. Benchmark the framework on national and international standards
- h. Publish the framework

It is necessary for all the entities of the DHET + the delivery partners listed in section 2 of the agreement to cooperate on the development of the frameworks. The responsibility of key delivery partner departments will be for officials to participate in task teams to provide professional advice and expertise.

#### SUB-OUTPUT 2: Develop mechanisms to interface operational systems

The key activities for the development of the required interfaces between operational systems are:

- a. Undertake a high level strategic audit of operational databases within the DHET, within its entities and within government (delivery partner departments)
- b. Identify the platforms and data formats for interfaces between the different systems
- c. Develop the required data transfer/exchange protocols
- d. Develop the technical architectural plan for the interfaces
- e. Develop the required interfaces

The role of the delivery partners will be to provide expertise as members of the relevant task teams. All technical activities will be undertaken by DHET and SITA via a formal service level agreement and engagement.

#### **SUB-OUTPUT 3: Develop strategic management information systems**

The key activities for the development of the strategic information systems are:

For the strategic intelligence system:

- a. Establish a reference team of DHET + STATSSA + EDD + DTI + DOL + DST + HSRC
- b. Develop a partnership MOU/protocol agreement with DST and the HSRC for the provision of analyses, surveys, studies, investigations and research into the supply and demand of skills

- c. Develop a delivery schedule of research outputs
- d. Build research capacity of high quality in the country
- e. Establish a database of the research outputs

For the career information and guidance system:

- a. Develop terms of reference for SAQA to extend its current career guidance information system into the national system. (SAQA has a mandate for the advocacy of the NQF.)
- b. Assess SAQA's requirements to expand its vocational guidance heldesk service and supplement SAQA resources from NSF funding.
- c. Align with the work of HESA on NiSHE
- d. Assess the career guidance system used by DoL and interface with relevant components
- e. Identify other partners to provide complementary and supplementary career services in the country (ongoing)
- f. Develop a national learning exchange as part of the career information system

For the business intelligence reporting system:

- a. Data from the HEMIS, FETMIS, ABETMIS, SETAMIS (WSP) and Lurits systems are interfaced into a Higher Education and Training Business Intelligence Reporting System
- b. Data from Umalusi, SETA, QCTO and HEQC on learner achievement information is interfaced with the SAQA National Learner Records Database
- c. Data from all interfaced databases and datasets is included in the BIS
- d. Reports on the supply and demand of skills in the country are produced (including trends)

#### 7. RISKS, CONSTRAINTS AND MITIGATION STRATEGIES

The main risk is the high level of collaboration that is required between departments with regards to the development of standardised frameworks and the sharing/exchange of data. This will be mitigated by the development of protocols for sharing and the creation of inter-department delivery teams. In addition SITA will be engaged to assist DHET with the interfacing of systems. SITA has been consulted on the delivery agreement at a meeting on 23<sup>rd</sup> September 2010. Funding will be sourced from the National Skills Fund (NSF) and all departments that receive NSF funding will need to comply with Practice Note 9 of 2008/9 of Treasury.

#### 8. GOVERNANCE AND REPORTING ARRANGEMENTS

The Implementation Forum for this deliverable will meet twice a year. Task teams will be set up for the delivery of each indicator to oversee the relevant activities, offer professional support and advice and monitor progress. Quarterly progress reports for each indicator will be presented to the task teams for approval before being provided to the Minister of Higher Education and Training and the Minister for Performance Monitoring and Evaluation. The HEDCOM subcommittee on Information and Planning will

serve as the implementation forum for provinces and progress reports will be provided to HEDCOM via this subcommittee. In addition, quarterly progress reports will also be presented to the Council of Education Ministers which will serve as the MinMEC.

A website will be developed as the central communication portal for this delivery agreement.

#### 9. APPENDIX A: RESULTS CHAIN

Appendix A for agreement 1 provides a list of outputs and sub-outputs indicating the roles and responsibilities of all delivery partners. The outcomes, outputs and sub-outputs, with causal logic, are reflected in a results chain or log frame.

Indicators are also provided for the outcomes, outputs and sub-outputs as well as baseline information and targets.

#### 10. APPENDIX B: HIGH LEVEL IMPLEMENTATION PLAN BY SUB-OUTPUT

Appendix B for agreement 1 shows for each output (i) the agreed upon sub-outputs and activities (ii) with the agreed indicators and milestones (iii) by institution (iv) against a timeline.

#### 11. SIGNATORIES

The Ministers of the key delivery partner departments and Members of the Executive Council for Education will each sign the separate signatory pages together with the Minister of Higher Education and Training indicating acceptance of the agreement.



### **DELIVERY AGREEMENT 2**

For Output 5.2 – Increase access to programmes leading to intermediate and high level learning

### And

For Output 5.3 – Increase access to occupationally-directed programmes in needed areas and thereby expand the availability of intermediate level skills (with special focus on artisan skills)

#### 1. INTRODUCTION

This delivery agreement document addresses Outputs 2 and 3 of Outcome 5: 'A skilled and capable workforce to support an inclusive growth path'.

#### 2. HIGH LEVEL PROBLEM STATEMENT

South Africa suffers from the twin scourges of high unemployment and a shortage of critical skills needed to drive economic growth and social development. The skills shortage underpins many of the challenges which government faces with regards to service delivery and the expansion of decent work for a rising proportion of the population.

Historically this problem was aggravated by the non-alignment of the work done by the pre-2009 Departments of Education and Labour; where the Department of Education focused on learners on the supply side of the labour market, whilst the Department of Labour focused on the needs of the labour market, on the demand side. The disjuncture between the two was evidenced by too many graduates from the education system being unable to access employment, whilst certain skills remained critically scarce in the labour market. It must also be highlighted that this disjuncture was also compounded by the apparent limited absorptive capacity of the economy to accommodate the numbers of graduate from the supply side.

The establishment of the Department of Higher Education and Training (DHET) creates the opportunity to address this problem – bringing together as it does the public and private education and training provider community with the Sector Education and Training Authorities (SETAs), (SETAs being agencies which act as intermediaries for the labour market at large). The cohabitation of these two previously divided sets of institutions under a single umbrella creates the opportunity for the design of 'pipelines' from education to work, where not only the theoretical knowledge together with the social values required are provided for, but also opportunities to gain induction into the occupations that learners seek to fill when they launch onto their first careers. The DHET also potentially opens the doors for workers, from both the formal as well as the informal economy, to return to study to improve their work station and incomes.

The establishment of the DHET makes it possible to develop not only a differentiated, coherently organised post-school learning system; it also creates the conditions for more systematic planning, monitoring and evaluation. This capability, once realised will enable evidence based policy formulation and evaluation. The previous absence of such a system prompted the establishment of the Joint Initiative on Priority Skills Acquisition (JIPSA) — work which will now take place under the Human Resource Development Council, which the DHET will serve. This was work that the National Skills Authority could not perform because of the bifurcation of the system.

#### 3. IDENTIFICATION OF DELIVERY PARTNERS

The delivery partners for the achievement of Outputs 2 and 3 relate to employers (public and private), government departments, labour market users, as well as the provider community. On the 10 September 2010, the following social partners signed the Skills Summit Declaration signalling that commitment and support to the Minister to deliver the outputs of Outcome 5:

- a) Labour Unions,
- b) South African College Principals Organisation (SACPO),
- c) Further Education and Training Employers Organisation (FETCEO),
- d) Adult Learning Network (ALN),
- e) Association of Private Providers of Education, Training and Development (APPEDT)
- f) National Skills Authority (NSA)
- g) Higher Education South Africa (HESA)
- h) Business Unity South Africa (BUSA)
- i) South African Technology Network (SATN)
- j) Quality Council for Trades and Occupations (QCTO)
- k) South African Qualification Authority (SAQA)
- I) Umalusi
- m) Council on Higher Education (CHE)

This delivery agreement is entered into between the Minister of Higher Education and Training with the following Members of Executive Councils who are executive authorities of Education in the Provinces in terms of the Intergovernmental Relations Act, read in conjunction with the FET colleges Act, the Adult Basic Education and Training Act, as well as the Skills Development Act:

- a) Member of the Executive Council: Eastern Cape Department of Education:
- b) Member of the Executive Council: Free State Department of Education:
- c) Member of the Executive Council: Gauteng Department of Education:
- d) Member of the Executive Council: KwaZulu-Natal Department of Education:
- e) Member of the Executive Council: Limpopo Department of Education:
- f) Member of the Executive Council: Mpumalanga Department of Education:
- g) Member of the Executive Council: Northern Cape Department of Education:
- h) Member of the Executive Council: North West Department of Education:
- i) Member of the Executive Council: Western Cape Department of Education:

#### 4. LINKING OUTPUTS TO OUTCOME 5

### 4.1 OUTPUT 2: INCREASE ACCESS TO PROGRAMMES LEADING TO INTERMEDIATE AND HIGH LEVEL LEARNING

#### **PROBLEM STATEMENT**

According to a study published by the HSRC in December 2009, 17% and 31% of youth aged 17 and 18 respectively were not in school in 2007. The average percentages of youth of 17 and 18 years that were not in school between 2002 and 2007 are 15% and 28% respectively. Of those in school and enrolled in grade 12 between the years 2001 and 2009 an average of 12% did not write the Senior Certificate and National Senior Certificate. In this nine year period the average failure rate at this level was 33%. Of those that passed, 18 % achieved degree entry grades. The low attendance rates, high drop out and failure rates contribute to the constitution of the set of about 3 million youth between the ages of 18 and 24 who are neither in the education system nor in employment.

The Labour Force Survey also indicates that in the first quarters of 2008, 2009 and 2010, 74%, 75% and 72% of the total unemployed respectively fell in the category of those between 15 and 34 years. Statistics South Africa also estimates that 16% of the population aged 20 and above is functionally illiterate.

This output seeks to address the problem faced by those adults and youths who do not meet the entry requirements for the post-school programmes that they may wish to enter. The programmes that they may wish to enter may require basic education or a school-leaving certificate with specified symbols in certain subjects. It therefore includes as beneficiaries those who dropped out of school before they completed Grade 12 as well as those who completed Grade 12 but did not achieve the necessary pass rate. It also addresses the needs of young people who take a conscious decision at an early that they need to study towards a vocational qualification with some foundational preparation for the world of work and a possibility of pursuing higher education studies. The Output aims to expand the number of learners able to embark on programmes leading to intermediate and high level skills acquisition – i.e. those programmes identified in Outputs 3 and 4.

This output has four sub-outputs:

- a) Increase the number of ABET level 1-4 learners
- b) Improve NCV success rates, as part of the massification of the programme.
- c) Create "second-chance" bridging programmes (leading to a matric equivalent) for the youth who do not hold a senior certificate
- d) Provide a range of learning options to meet the demand of those with matric but do not meet requirements for university entrance

4.2 OUTPUT 3: INCREASE ACCESS TO OCCUPATIONALLY-DIRECTED PROGRAMMES IN NEEDED AREAS AND THEREBY EXPAND THE AVAILABLITY OF INTERMEDIATE LEVEL SKILLS (WITH SPECIAL FOCUS ON ARTISAN SKILLS)

#### **PROBLEM STATEMENT:**

Research, including that undertaken or commissioned by SETAs and the Department of Labour, has indicated critical skills shortages in specific occupations and at certain levels of employment. Such research has established for example that there is a critical shortage of engineers, finance, construction and operations managers. It has also established that there is a critical shortage of skilled artisans in the country. This has raised concerns in business and government about the country's capacity to meet short, medium and long term economic growth targets. Historically South Africa had to augment its domestically trained artisan pool by importing (white) labour from abroad. The lack of adequate supply was exacerbated by factors such as a decrease in the numbers trained by state owned enterprises in the 1980s, due to commercialisation. Another factor seen as contributing to this shortage is the misalignment of skills developed in further education colleges to the needs of industry. According to one study, 280 000 learners graduated from engineering including artisan related programmes in 2000 but only 34% of these were absorbed into employment. The poor absorption rate is attributed to the learner's lack of work based experiential training that is an intrinsic part of traditional apprenticeships.

This output seeks to address the problem of critical skills shortages identified with a focus on intermediate level skills, especially artisanal skills. The aim is also to foreground experiential learning as intrinsic to enhancing the employability of college graduates. The output has six sub outputs, viz:

- a) Increase the number of learnerships
- b) Produce more artisans per annum
- c) Put in place measures to improve the trade test pass rate
- d) Increase the placement rate of learners from learnership and apprenticeship programmes, as well as learners from NCV programmes, who require workplace experience before being able to take trade tests or other summative assessments. At least 70% of learners should have placement every year.
- e) By 2011, establish a system to distinguish between learnerships up to and including level 5, and level 6 and above.
- f) Increase the proportion of unemployed people, as compared to employed people, entering learnerships

#### 5. OUTPUT-BASED ANALYSIS

### 5.1 OUTPUT 2: INCREASE ACCESS TO PROGRAMMES LEADING TO INTERMEDIATE AND HIGH LEVEL LEARNING

### 5.1.1 SUB-OUTPUT 1: INCREASE THE NUMBER OF ABET LEVEL 1-4 LEARNERS FROM A BASELINE OF 269 229 TO 300 000 PER ANNUM

#### 5.1.1.1 Problem statement

The provision of foundational learning qualifications recognises that there are youths and adults who are unable to cope with the learning required for vocational and occupational qualifications at NQF levels 2 – 4. In order to increase access and success in this area, appropriate policies, foundational learning programmes' curriculum, foundational learning qualifications must be introduced and strategies for implementation developed. The collaboration between Umalusi and the QCTO is a key to the development of the curriculum of these programmes and for the assessment of their achievement.

#### **5.1.1.2** What will need to be done differently?

The programmes historically provided by the Departments of Education and of Labour were significantly different. The Department of Education's programmes offered mainly by the Public and Private Adult Learning Centres focused principally on literacy and numeracy for adult learners. The Department of Labour's courses, on the other hand, were principally of a more practical nature – teaching learners practical skills with which to survive in the informal economy. In future, there is a need to combine these two elements together into programmes which both strengthen learners' literacy and numeracy skills whilst, at the same time, providing them with skills to achieve sustainable livelihoods.

Over the four years ahead a clear national plan for this sector will need to be developed which not only addresses the sustainable livelihood objective, but also lays the foundation for subsequent advancement to higher levels of learning where the learners so desire. This shall form a central part of the proposed Green Paper process.

#### 5.1.1.3 Key Activities

- a) Align 'training' component of skills development to 'ABE' component to enhance sustainable incomes after training for those learners unable to secure formal economy employment;
- b) Standardise the architecture of such programmes so that they can serve not only individual learners but also participants in other Government initiatives such as the Extended Public Works Programme and National Youth Service initiatives on a mass scale. The QCTO has a key role to play in regard to the credentialing of such programmes.
- c) Ensure that that the Quality Council for Trades and Occupations develops meaningful learning pathways from the less skilled to more skilled occupations so that learners can progress from humble entry points up the occupational hierarchy in given occupational families over time.
- d) A clear curriculum for foundational programmes geared towards adults must be developed. This will enable learners with an ABET 3 or 4 levels of literacy and numeracy to cope with occupational programmes on NQF level 2 4.
- e) Qualifications for foundational learning must be finalized.

f) Providers need to be accredited and other implementation challenges met

#### **5.1.1.4** Evaluate legislative environment

**Changes required:** DHET proposes drafting a Green Paper to expand learning in Community Education and Training Centres, whose functions will include AET programmes. This process will result in legislative amendments in the Constitution and in all legislation relating to post-school learning.

#### **5.1.1.5** Evaluate existing regulatory framework

To enable partnership and co-ordination in the sector, there is a need to revisit the regulations for the establishment of the National Board for Adult Basic Education and Training. These regulations had allowed for the establishment of a Board to advise the Minister. There is also a need to review the policies and related regulations covering the qualification architecture, as described. The role of Provincial Skills Development Fora need to be considered too.

#### 5.1.1.6 Evaluate existing institutional arrangements

The existing institutional arrangements depend on provincial delivery for ensuring access and success. One of the possible mechanisms is to have a clear planning process with Provinces so that there is consensus on priorities. Currently, ten different plans exist for ABET in the country. Minimally, national priorities must find expression in the activities and plans at provincial level. Complimentary amendments to the distribution of National Skills Fund: Social Development Funding Window are required. The role of the Provincial Skills Development For a need to be considered in this regard.

#### **Changes required:**

- a) An institutional architecture needs to be designed to manage the new partnerships that are required. Clearer direction must be provided in relation to the location of this sector viz. in Higher Education and Training or with PED's and the PSDF's.
- b) A new institutional landscape must be conceptualized beyond the use of school facilities. Partnerships with those NGOs and private providers that historically provided occupational programmes must be strengthened
- c) Quality assurance of occupational programmes, under the QCTO, must be strengthened.

#### 5.1.1.7 Evaluate management systems, processes and skills

Currently, the educators are employed on short term contract basis by the provinces and in certain provinces e.g. Gauteng, the Centre coordinators are employed on permanent basis. This causes a great deal of instability as educators are looking for permanent employment. The educators are also paid on hourly rates and thus do not get any tangible benefits. The turnover rate amongst ABET practitioners is very high as they continuously strive to be employed in the mainstream. These challenges hamper the delivery of Output 2 as programmes in the ABET sector need sustainability from practitioners. In the case of Skills development programmes, the course fee paid to providers incorporated an allowance for trainers. These systems need to be aligned and a new complimentary funding model developed.

**Changes Required:** Standardise the employment conditions of service for educators in the AET sector and proceed to a programme funding model.

#### 5.1.1.8 Evaluate funding Framework

#### **Changes required:**

- a) The basis for funding these programmes needs to be finalised either educators are provided more stable employment conditions OR a programme funding model must be developed and implemented.
- b) Develop a complimentary funding model so that the role and function of voted funds and National Skills Fund resources as well as private / learner funds (where relevant) are clarified. Where necessary the contribution of other government departments to relevant programmes (e.g. EPWP and National Youth Service) must be considered as well.
- c) Once finalised implement the Norms and Standards for funding Adult Education and Training;

### 5.1.2 SUB-OUTPUT 2: IMPROVE NCV SUCCESS RATES, AS PART OF THE MASSIFICATION OF THE PROGRAMME

#### Problem statement

This qualification has only recently been introduced but it has suffered from a number of problems emanating from unstable legal and policy environment, lecturer capacity, learner sociology, governance and management capacity and the inadequate quality assurance system. The impact of all these variable manifests itself in the poor learner achievement rates. Recent research undertaken by uMalusi suggests that the purpose of the qualification is unclear, the curriculum needs improvement and the assessment regime is inadequate.

#### 5.1.2.1 What will need to be done differently?

At the core of this sub-output are access, quality, purpose and institutional efficiency issues. To address these issues and to ensure that all the partners/stakeholders have a common understanding of the challenges that might militate against the achievement of this sub-output, the DHET took a lead, with the support, of the ETDP SETA, to bring all partners together to an FET Summit held on 3-4 September 2010. The FET Summit Steering Committee has submitted a report to the Minister which makes recommendations in the following focus areas:

- The FET subsystem architecture and design
- Sub-system's macro and institutional governance
- Planning and funding
- Staff employment and development, as well as improvement of teaching and learning
- Monitoring, evaluation and research
- Organisational development, support and change management and support
- Student Support and guidance

#### 5.1.2.2 Key activities

In terms of the recommendations of both the Skills Summit and the FET Summit, there is consensus among the partners that the following activities will need to be executed to ensure the attainment of the output above:

- a) Fixing and stabilising the systemic and institutional governance
- b) Providing support for college management and governance;
- c) Ensuring management and governance accountability for institutional performance;
- d) Providing learner support based on research of learner sociology in colleges
- e) Providing support to lecturers based on an understanding of lecturer needs
- f) Defining the mission and purpose of colleges
- g) Reviewing the current NC(V) and NATED qualifications and related curriculum, while both qualifications remain the flagship programmes offered in FET colleges in line with institutional mission and purpose
- h) Managing the pipeline from institutions to the workplace and workplace to the institutions (articulation) through the notion of PIVOTAL programmes introduced by the National Skills Development Strategy III (NSDS III);
- i) Promoting and strengthening functional partnership between universities, colleges, SETAs and employers.
- j) Ensuring a reliable and predictable stream of funding from the Exchequer, the National Skills Fund and the SETA Grants
- k) Review the current college funding policy as a basis for the development of a holistic integrated funding model for the subsystem
- I) Re-conceptualise the assessment and examination system suitable for the college sub-system as part of the new post-school education and training system
- m) Provide students and prospective students with career guidance and information on colleges and programme offerings, career choices beyond the college, student financial aid

The DHET proposes to initiate a project, called Collaboration for Occupational Skills Excellence (COSE) which will contribute to the achievement of Outputs 2 and 3.

#### 5.1.2.3 Evaluation of the legislative environment

The FET Colleges are subject to or influenced by a number of pieces of legislations, including

- a) The Constitution of the Republic of South Africa Act, 1996
- b) The Further Education and Training Colleges Act, 2006
- c) The Skills Development Act, 1998
- d) The National Qualifications Framework Act, 2008
- e) The General and Further Education and Training Quality Assurance Act, 2001

#### What needs to change?

In order to deliver on this output, Schedule 4 and Section 29 of the Constitution need to be amended with a view to stabilizing the system, provide management and governance certainty by making colleges an exclusive national competence. The constitutional amendment will have consequential implications for the FET Colleges Act, which must also undergo amendment.

A significant number of the FET Summit recommendations require a fundamental change in the policy positions relation to the whole architecture of post-school education and training system. The new policy trajectory that must emanate from the Green Paper process, is to inform how the post-school education and training legislation is to be amended. This legislation that is to be re-assessed is the NQF Act, Higher Education Act, FET Colleges Act, Skills Development Act, General and Further Education and Training Quality Assurance Act.

The interventions aimed at improving student academic support services in terms of the Student Support Services Framework developed by the Department do not have a Ministerial policy status. Similarly, there are no minimum requirements for lecturer on the basis of which they can be regarded as qualified to teach or train students at an FET college. These are urgent policies that the DHET must, with the approval of the Minister after consultation with labour and CEM, must promulgate.

#### 5.1.2.4 Evaluate the existing institutional arrangements

The current institutional arrangement is not adequate for the delivery of the output. Neither the provinces nor the Department of Higher Education and Training have the human and financial resource to support colleges in order to improve access, quality and efficiency.

In line with the President's directive to relocate legislative, policy, administration and management of colleges to the Department of Higher Education and Training, Cabinet already approved the amendment to the Constitution and the MEC's of Education have agreed with the Minister to amend the FET Colleges Act, 2006. During the course of these amendments, a decision must be made on whether the State or Colleges are the employer of the college staff.

Further, the college councils have varying degrees of capacity to play their fiduciary role in colleges. Similarly, the college management need support to manage these institutions effectively and be accountable for the performance of their institutions.

In addition to the above, the work of the QCTO will need to be accelerated and the National Artisan Moderating Body (NAMB) established in order to address the design and quality assurance of occupational qualifications which will compliment the vocational programme offerings at colleges.

#### 5.1.2.5 Evaluate the management systems, processes and skills

The management systems and processes both at institutional and Departmental level are inadequate to achieve the output. With the ultimate move of colleges to the national Ministry, a new institutional support regime should be developed to support HET services (universities, SETAs, ALCs and Colleges). In some colleges, new management systems need to be put in place whereas in others, the management systems and processes need to be radically overhauled. In this regard, partners must agree on the nature and extent of support and overhaul required.

Again the management systems, processes and capacity of the QCTO and the NAMB will have to be built to ensure that occupational qualifications can augment the NCV at college level.

#### **5.1.2.6 Funding frameworks**

The national Norms and Standards for Funding FET Colleges serve as the only funding framework used to distribute funds to FET colleges. In preparation for the transfer of colleges from the provincial to a national legislative competence, the Programme 5 budgets have been changed into a Schedule 4 conditional grant. This calculation has taken into account the voted funds only (for preparatory programmes) because the NSF and the SETA Grants presuppose a student has the initial qualification for entry into occupation-specific training.

## 5.1.3 SUB-OUTPUT 3: CREATE "SECOND-CHANCE" PROGRAMMES (LEADING TO A MATRIC EQUIVALENT) FOR THE YOUTH <u>AND ADULTS</u> WHO DO NOT HOLD A <u>NATIONAL</u> SENIOR CERTIFICATE.

#### 5.1.3.1 What will need to be done differently?

In the past, the assumption has been that both school candidates and out-of-school candidates need the same qualification to access any post-secondary school learning opportunities. There is now a realisation that adults and out-of-school youths have needs that are different from those of learners of schoolgoing age. Therefore a new view is that there should be a qualification or qualifications that serve the needs of adults and out-of-school youths who do not have a Matric-equivalent.

#### 5.1.3.2 Key activities

- a) Develop a National Senior Certificate (Adult Matric) designed to serve the needs of adults and outof-school youths.
- b) Develop a flexible assessment regime that is suitable for adults
- c) Conduct research into what the input items will be and what the assessment regime will cost in terms of infrastructure, technology, and human resources
- d) Build the institutional capacity required.
- e) Build collaboration between uMalusi and QCTO in the achievement of this output so that those who enter through an occupational route are assisted to progress to post-matric levels.

#### 5.1.3.3 Evaluation of the legislative environment

This is yet to be assessed.

#### 5.1.3.4 Evaluation of the existing regulatory framework

Because this is a new qualification, new policies relating to examination, assessment and certification will have to be developed.

#### 5.1.3.5 Evaluate the existing institutional arrangements

A qualification or qualifications of this nature should have an institutional base. An institutional base is necessary for:

a) Student support and guidance

- b) Registration and enrolment for the qualification
- c) Academic support
- d) Assessment/Examinations

FET Colleges can form such an institutional base in the short- to medium term until the notion of Community Education and Training Centres crystallizes into a viable fully equipped institutional form for education and training.

#### 5.1.3.6 Evaluate the management systems, processes and skills

These will have to be built once the qualification is developed.

#### 5.1.3.7 Funding framework

Because this is a new qualification, it does not have an existing funding framework. Currently learners who enroll for the old Senior Certificate do so in their private capacity. There is no state subsidy for this purpose. The State carries the costs for examination and certification. Based on research results, as indicated under activities, state needs to determine what the unit cost for the flexible assessment regime will be and include the unit cost in the National Norms and Standards for FET Colleges.

5.1.4 SUB-OUTPUT 4: PROVIDE A RANGE OF LEARNING OPTIONS TO MEET THE DEMAND OF THOSE WITH MATRIC BUT DO NOT MEET REQUIREMENTS FOR UNIVERSITY ENTRANCE

#### 5.1.4.1 Problem statement

The current college menu of programmes is principally directed to learners who do not yet have a matric certificate. The college system does not currently provide programmes at the post-matric level, and matriculants are directed to repeat equivalent level programmes such as the NC(V) and 'N' 1-3 courses.

Historically the colleges provided post-matric level courses, called the N4 – N6 programmes. These are currently being offered. However, the future status of the N1-N6 programmes will be decided by the Minister based on the advice emanating from the declarations and resolutions of the FET College Summit in September, as well as the advice of the QCTO and Umalusi in their capacities as Quality Councils

#### 5.1.4.2 What will need to be done differently?

The Green Paper process will ultimately make strong recommendations with respect to colleges offering higher education programmes. Assuming that colleges are permitted to provide these programmes, then colleges must be supported to provide a range of learning options to meet the demand of those with matric but who do not meet requirements for university entrance. The role and function of the Higher Certificate and Advanced Certificate on the HEQF must be clarified. Part-time learning for working people needs to be established.

#### 5.1.4.3 Key activities

- a) Ensure that the higher education and training system is highly integrated and articulated in the form of a pipeline from institutions to workplace and from workplace into institution (system permeability)
- b) Offer level 5 and 6 qualification (higher vocational education and training) at colleges in collaboration with University and increase N4-N6 programmes.
- c) Offer Level 5 and 6 occupationally –directed programmes
- d) With the advice of QC's, build college to deliver these programmes.

#### 5.1.4.4 Evaluation of the legislative environment

The offering of qualifications in colleges is affected by the provisions of the FET Colleges Act, 2006, the National Qualifications Framework Act, 2008, the General and Further Education and Training Quality Assurance Act, 2001. Because of the NQF sector focus, colleges can only offer higher education qualification under the authority of a higher education institution

There must be amendments to the FET Colleges Act to allow colleges to offer higher vocational education programmes at the level of a Certificate and Diploma, subject compliance with quality assurance requirement in terms of the Higher Education Act, 1997 and the Skills Development Amendment Act (2008).

#### 5.1.4.5 Evaluation of the existing regulatory framework

Consequential amendments to the FET Colleges Act and Regulations must be made.

#### 5.1.4.6 Evaluate the existing institutional arrangements

System-wide agreement between the DHET and the QCs, colleges and higher education institutions must be settled.

A number of colleges already offer higher education programmes in partnership with some universities. It is these partnerships that must be strengthened and supported.

#### 5.1.4.7 Evaluate the management systems, processes and skills

Capacity of the college management, governance as well as lecturer expertise will need to be supported and developed through collaboration and partnerships with universities, and investment in the development of the college faculty.

#### 5.1.4.8 Funding framework

There is currently no funding framework for HE programmes offered in FET colleges. However, should the colleges be allowed to offer HE programmes in their own right, the same or adapted funding formula can be used to fund students in FET colleges. Occupationally-directed HE programmes can be funded using the national skills fund (NSF) or the SETA Grants.

5.2 OUTPUT 3: INCREASE ACCESS TO OCCUPATIONALLY-DIRECTED PROGRAMMES IN NEEDED AREAS AND THEREBY EXPAND THE AVAILABLITY OF INTERMEDIATE LEVEL SKILLS (WITH SPECIAL FOCUS ON ARTISAN SKILLS)

### 5.2.1 SUB-OUTPUT 1: INCREASE THE NUMBER OF LEARNERSHIPS TO AT LEAST 20 000 PER ANNUM BY 2014

#### 5.2.1.1 Problem statement

The problem is not only the number of learners successfully completing learnerships. There is also a quality problem. Prior to the passing of the Skills Development Amendment Act, 2008, learnerships were principally designed by SETAs. As a result each SETA developed its own learnerships for the occupations it required. The result was that in many instances different learnerships were developed for the same or similar trades and occupations. There was also the reality that different SETAs applied different quality standards when they assessed these qualifications. As a result learnerships earned an indifferent status on the labour market.

Furthermore, although learnerships are legally defined as an alternative route to taking a trade test, frequently recruits are required to have first completed a college qualification. The knowledge component of learnerships has however supposedly covered the same material. This matter requires interrogation and clarification.

There is also a definitional problem. Currently apprenticeships are defined as learnerships but there are still old regulations that define different conditions for their completion (e.g. the completion of 'N2' qualifications from a college for the theory component). This too requires clarification.

#### 5.2.1.2 What will need to be done differently?

The Quality Council for Trades and Occupations was developed to address these problems. It must rationalise the existing registered learnerships with reference to the Organising Framework of Occupations and must determine whether learnerships and the associated learnership agreements should embrace all three components of the occupational qualification or only the practical and work experience components. If it determines the latter then there is need to align learnerships with college and university of technology programmes so that their respective roles are clarified and their collaboration promoted. Funding complementarities will also need to be clarified.

The establishment of ESDA's firmly in the South African skills development landscape will also result in the expansion of provision of learnerships if they achieve their objective of expanding the participation of SMME in the provision of learnerships as well as of employers outside of the urban centres.

#### 5.2.1.3 Key activities

- a) Operationalise the QCTO (regulations, staffing and systems)
- b) Clarify the definitions of 'learnership', 'apprenticeship', 'internship' both in relation to one another and together in relation to college and university programmes where the college or university provides the knowledge component.
- c) Enhance the efficiency and effectiveness of SETA roles and functions
- d) Review ESDA policy framework in order to align it with Skills development strategy and other government strategy (so that more firms, particularly small ones, are induced to take on learners).
- e) Improve MIS to support learner tracking and tracing
- f) Improve monitoring and reporting
- g) Implement COSE project.

#### 5.2.1.4 Evaluation of the legislative environment

The legislation that impacts on the achievement of this sub output is the Skills Development Act, Skills Development Levies Act, NQF Act, FET Colleges Act. The definitions of the various programmes (learnerships, internships, apprenticeships) need to be clarified.

#### **5.2.1.5** Evaluation of the existing regulatory framework

There is need to develop regulations under the Skills Development Act such as the QCTO related regulations for occupational qualifications design and quality assurance. There is also need to revise regulations for learning programmes (updating the learnerships regulations, 2007) and funding regulations that frame the use of funds by SETA's and the NSF. These regulations need to be aligned with NSDS III. There is also need to clarify learnership, internship and apprenticeship regulations and align with revision of vocational programmes.

#### **5.2.1.6** Evaluate the existing institutional arrangements

- a) Improve MIS to support learner tracking and tracing, and reporting on learning programmes.
- b) Enhance the efficiency and effectiveness of SETA delivery
- c) Enhance SETA and FET partnerships for improved delivery of learnerships.
- d) Strengthen DHET co-ordination and support to SETAs.

#### 5.2.1.7 Evaluate the management systems, processes and skills

The MIS has to be improved to facilitate effective learner tracking and tracing, and reporting on learning programmes. The efficiency and effectiveness of SETA delivery has to be enhanced and partnerships between SETAs and FET colleges improved in order for improved delivery of learning programmes to be achieved. DHET co-ordination and support to SETAs needs to be strengthened. This should include effective capacitation of SETA boards and management, as well as the acceleration of implementation of QCTO.

#### **5.2.1.8** Funding framework

Currently the above activities are budgeted for, except in the case of the QCTO where the programme has submitted an MTEF bid for additional resources.

#### 5.2.2 SUB-OUTPUT 2: PRODUCE AT LEAST 10 000 ARTISANS PER ANNUM BY 2014

#### 5.2.2.1 What will need to be done differently?

There is an urgent need to research the four parallel routes to artisan status (learnerships, apprenticeships, recognition of prior learning (RPL) and vocational training programmes plus regulated work experience) currently listed in section 26D of the Skills Development Act, 1998. Anecdotal evidence suggests that many learners first complete a vocational programme at FET colleges and then are recruited onto learnership programmes which prepare them for their trade tests. If this proves to be a general pattern, or an efficient and effective pattern supported by employers and unions, then it may be necessary to streamline the pathway from school to artisan status into a single route, with RPL possibilities. The route would then be similar for all learners (first college then learnership then trade test) – with a blended version available for those already in employment. The colleges will then have a major role to play in the delivery of artisan programmes, as they did in the past, and the partnership with firms, through SETAs, will have to be systemically structured (as anticipated by the 'pivotal programme' in the National Skills Development Strategy III). The recently legislated National Artisan Moderating Body and the Quality Council for Trades and Occupations will need to be operational too for streamlined and quality assured artisan training.

The systems that are developed, and the incentives that are designed, will have to recognise that many employed workers (in both the formal as well as in the informal economy) may wish to develop their skills and so upgrading from lower levels will need to be a part of the new system.

The major constraint in the delivery of artisan training is in finding sufficient work experience placements for learners (through learnerships). In order to address this constraint it will be necessary to encourage SMME's to participate, possibly with the assistance of Employment and Skills Development Agencies (ESDAs). The public sector also has a key role to play and for this to be expanded funding possibilities need to be reviewed. Programmes to expand the reach of artisan training in the rural areas will also be needed. To track the success of these programmes it will be necessary to improve the MIS.

#### 5.2.2.2 Key activities

- a) Proceed to use current avenues, included the Accelerated Apprenticeship programme of the Merseta, until alternatives are available.
- b) Conduct research into the optimal route for artisan training;
- c) Support the development and implementation of the COSE project so that by 2015 the curriculum for priority trades and occupations is developed, implemented and reported on.
- d) Operationalise the QCTO (regulations, staffing and systems)
- e) Establish and operationalise the National Artisan Moderating Body NAMB
- f) Review ESDA policy framework In order to align it to NSDS III and other strategies.
- g) Implement NSDS III (pivotal grant) and systematize partnerships between colleges and SETAs
- h) Enforce monitoring and reporting aligned to new Monitoring Information System.
- i) Develop capacity for FET Colleges to operate as accredited trade test centres

#### 5.2.2.3 Evaluation of the legislative environment

If the work of QCTO and the proposed research find that a streamlined route to artisan status would be efficient and effective then the Skills Development Act, Skills Development Levies Act and FET Act will need to be reviewed.

#### 5.2.2.4 Evaluation of the existing regulatory framework

Learnership regulations and SETA funding regulations will need to be revised in line with the developments outlined above. Furthermore new regulations will be needed to operationalise artisan prescriptions in the SDA, including those required by the QCTO (e.g. for the listing of artisans) and the new NAMB. These will all need to take into account NSDS III.

#### **5.2.2.5** Evaluate the existing institutional arrangements

ESDA's, Skills Development Institutions, QCTO and NAMB should be established and SETA and FET College partnerships enhanced for improved delivery of learning programmes broadly and artisan development programmes specifically.

#### 5.2.2.6 Evaluate the management systems, processes and skills

Systems are required to facilitate the partnerships between firms and colleges. There is need to improve MIS to support artisan tracking and tracing, and reporting on learning programmes and to enhance the efficiency and effectiveness of SETA delivery.

#### 5.2.2.7 Funding framework

Currently the above activities are budgeted for, except in the case of the QCTO where the programme has submitted an MTEF bid for additional resources.

### 5.2.3 SUB-OUTPUT 3: PUT IN PLACE MEASURES TO IMPROVE THE TRADE TEST PASS RATE FROM ITS 2009 LEVEL OF 46% TO 60% BY 2014

#### 5.2.3.1 What will need to be done differently?

The current pass rate of artisans at INDLELA is 45% and it should be improved in order to contribute to the demand of qualified artisans in the country. For pass rates to be increased there is need to improve the quality of learning programmes and to clarify the level of preparedness that learners need to have to take a trade test. It is expected that the functioning of the Quality Council for Trades and Occupations, the NAMB, the establishment of ESDAs, the strengthening of the relationship between SETAs and FET colleges will result in significant improvement in the quality of learnerships, apprenticeships and skills programmes.

#### 5.2.3.2 Key activities

- a) Initially continue with current arrangements but accelerate the activities below.
- b) Operationalise the QCTO (regulations, staffing and systems)
- c) Consolidate plans to implement NAMB by 2013 so that NAMB can accredit assessment sites
- d) Build the capacity of assessors
- e) Standardize assessments and build assessment banks
- f) Communicate requirements for learners so that prepared learners take trade tests.
- g) Support the development and implementation of the COSE project, so that by 2015 the curriculum for priority trades and occupations are developed and the capacity to implement them is strengthened in colleges, practical learning sites and work places for work experience.

#### 5.2.3.3 Evaluation of the legislative environment

See above for artisans

#### 5.2.3.4 Evaluation of the existing regulatory framework

See above for artisans

#### 5.2.3.5 Evaluate the existing institutional arrangements

See above for artisans, with a special need to operationalise NAMB

#### 5.2.3.6 Evaluate the management systems, processes and skills

See above for artisans, with a special need to operationalise NAMB

#### *5.2.3.7 Funding framework*

Currently the above activities are budgeted for, except in the case of the QCTO and NAMB where the programme has submitted an MTEF bid for additional resources.

5.2.4 SUB-OUTPUT 4: INCREASE THE PLACEMENT RATE OF LEARNERS FROM NCV AND 'N' PROGRAMMES IN WORKPLACE EXPERIENCE SO THAT THEY CAN TAKE TRADE TESTS OR OTHER OCCUPATIONAL SUMMATIVE ASSESSMENTS. AT LEAST 70% OF LEARNERS SHOULD HAVE PLACEMENT EVERY YEAR

#### 5.2.4.1 What will need to be done differently?

Research shows that college graduates who fail to get work experience seldom make a successful transition to work in their field of study. In order to increase the workplace placement rate of NCV and "N" learners more effective partnerships with employers, including with government as an employer, should be developed – which requires the active participation of SETAs. Intrinsic to this process is also the improvement of the quality and enhanced relevance of learning programmes to the needs of the work place.

In addition to the above, the earlier outlined initiatives with regards to the NCV need to be undertaken and the updating of the N courses in line with QCTO occupational programmes need to be accelerated. There is also a need to review the learnership / apprenticeship / internship alternatives that are currently available for those seeking work experience. The precise role and function of each of these must be clarified.

#### 5.2.4.2 Key activities

- a) NSDS III pivotal grant operationalised.
- b) Systems instituted to facilitate partnerships between providers and workplaces.
- c) QCs collaborate to achieve this output.
- d) QCTO operationalised.
- e) Address the role of government as employer taking on learners on learnerships/internships
- f) Clarify the meaning learnership / internship / apprenticeship
- g) If colleges are to facilitate the placement of graduates into work sites for learning, their role and responsibility (and the funding thereof) needs to be clarified and implemented.

#### 5.2.4.3 Evaluation of the legislative environment

The legal definitions of 'learnership/internship/apprenticeship' must be clarified.

#### **5.2.4.4** Evaluation of the existing regulatory framework

Funding Regulations which frames the use of funds by SETA's and the NSF need to be revised and aligned with NSDS III. Policy on qualifications and complimentary funding model needs to be finalised.

#### **5.2.4.5** Evaluate the existing institutional arrangements

There should be collaboration between institutions and SETAs established to facilitate the smooth transition from institutional learning to work. Once a complimentary funding model is developed, it should be implemented. The system should also facilitate the movement of workers to institutional learning. Systems are required to assist learners to make the transition from college to workplace – this may require colleges to act as ESDAs.

#### 5.2.4.5 Evaluate the management systems, processes and skills

There is need to improve MIS to support learner tracking. The efficiency and effectiveness of SETA delivery has to be enhanced and partnerships between SETAs, FET colleges and workplaces significantly improved.

#### 5.2.4.6 Funding framework

Resources should be allocated to enable colleges to oversee learning across institutional and workplace sites.

5.2.5 SUB-OUTPUT 5: BY 2011, ESTABLISH A SYSTEM TO DISTINGUISH BETWEEN LEARNERSHIPS UP TO AND INCLUDING LEVEL 5, AND LEVEL 6 AND ABOVE

#### 5.2.5.1 What will need to be done differently?

In SETA reporting there is currently no easy means whereby lower level learnerships can be distinguished from those which assist higher level learners to gain workplace learning. This hampers strategic planning for the placement of learners to attain high level skills

#### 5.2.5.2 Key activities

- a) The SETAs must enter an agreement with the DHET to submit their annual reports in a form which enables the identification of the level on which learnerships are entered.
- b) Reporting requirements to be aligned with this agreement.
- c) DHET to consolidate SETA reports to achieve this output.

#### 5.2.5.3 Evaluation of the legislative environment

None.

#### 5.2.5.4 Evaluation of the existing regulatory framework

The regulations covering the learnership agreement will have to be adjusted to signal level. The reporting requirements of SETAs must stipulate this distinction.

#### 5.2.5.5 Evaluate the existing institutional arrangements

No adjustment for this output required.

#### 5.2.5.6 Evaluate the management systems, processes and skills

SKIDMIS systems at SETAs, the QCTO and at the DHET must address this.

#### 5.2.5.7 Funding framework

No additional resources required, although the requirement for a consolidated and improved SKIDMIS is mentioned under Output 1.

## 5.2.6 SUB-OUTPUT 6: INCREASE THE PROPORTION OF UNEMPLOYED PEOPLE, AS COMPARED TO EMPLOYED PEOPLE, ENTERING LEARNERSHIPS FROM THE CURRENT LEVEL OF 60% TO 70%

#### 5.2.6.1 What will need to be done differently?

SETAs will have to be encouraged to incentivize employers to take on unemployed learners in preference to employed learners. This will need to be carefully balanced with the demands of the trade union movement for increased learning opportunities for their members. (See discussion on learnerships in Output 3.1 above for general requirements with regards to learnerships.)

#### 5.2.6.2 Key activities

- a) SLAs between DHET and SETAs will need to prioritize this.
- b) Address the role of government as employer to increase the number of learners in learnerships (funding regime?).
- c) Pivotal grant to incentivise employers.
- d) Clarify the meaning of learnership / internship / apprenticeship.

#### 5.2.6.3 Evaluation of the legislative environment

None required for this output.

#### 5.2.6.4 Evaluation of the existing regulatory framework

Funding regulations must address this.

#### 5.2.6.5 Evaluate the existing institutional arrangements

Establish ESDA's firmly in the South African skills development landscape in order to expand delivery for learning programmes to increase participation by SMME and rural areas in learnerships. The role of colleges in this regard must be addressed.

Establish partnerships between colleges and SETAs to promote placements.

#### 5.2.6.6 Evaluate the management systems, processes and skills

Improve MIS to support learner tracking and tracing, and reporting on learning programmes.

Enhance the efficiency and effectiveness of SETA delivery.

#### 5.2.6.7 Funding framework

A review of the current funding arrangements as prescribed in the SETA grant regulations and of NSF and SETA complimentary funding for these programmes should be undertaken. SETA surpluses will be used to fund this increase.

#### 6 INDICATORS, BASELINES AND TARGETS FOR OUTCOME

See Annexure A

#### 7 SYNOPSIS OF KEY ACTIVITIES

The establishment of DHET creates the opportunity for creating improved alignment between the delivery of colleges (at the intermediate level) and SETA's learnerships. This requires a review of current college and SETA prescriptions. It is envisaged that a simplified pipeline from school to the labour market will be possible in this new environment.

#### 8 RISKS, CONSTRAINTS AND MITIGATION STRATEGIES

Weak capacity in the DHET will negatively impact on the delivery of these outputs. To mitigate, this the DHET's new organogram will need to be speedily finalised and populated with competent people and quality systems rapidly developed.

#### 9 GOVERNANCE AND REPORTING ARRANGEMENTS

The Council of Education Ministers (CEM), chaired by the Minister of Higher Education and Training, established under the National Education Policy Act, 1996 will form the Executive Implementation Forum for this delivery agreement. This Forum is also regulated by means of an Implementation Protocol concluded between the Minister and the Education MECs in terms of the Intergovernmental Relations Framework Act.

The Committee of Heads of provincial education departments (HEDCOM), which is chaired by the Director-General: Higher Education and Training shall constitute the Technical (Administrative) Forum. Below the Steering Committee, there is the HEDCOM sub-committee on FET Colleges and ABET. This committee is structured in such a manner that all the stakeholders are represented formally or on invitation.

The SETA Forum will need to be more formally established and brought into conversation with the above structures through the DHET. The role of the National Skills Authority will also need to be mainstreamed, together with the HRD Council – in a manner that has yet to be designed.

The Quality Councils have a central role to play in the delivery of these outputs and they too will need to commit to delivering key outputs in line with the outputs identified in this document.

#### 10. APPENDIX A: RESULTS CHAIN

This section provides a list of outputs with definitions and implications. The outcomes, outputs, sub outputs with causal logic are reflected in a results chain or log frame

Indicators are also provided for the outcomes, outputs and sub-outputs as well as baseline information and targets, as shown in attached Appendix A.

## 11. APPENDIX B: HIGH LEVEL IMPLEMENTATION PLAN BY SUB-OUTPUTS

This section shows for each output (i) the agreed sub-outputs, (ii) with the agreed indicators and milestones (iii) by institutions (iv) against a timeline.

## 12. SIGNATORIES

The Members of the Executive Council for Education will each sign the separate signatory pages with the Minister of Higher Education and Training indicating acceptance of the agreement.



## **DELIVERY AGREEMENT 3**

For Output 5.4 – Increase access to high-level occupationally directed programmes in needed areas

And

For Output 5.5 – Enhance research, development and innovation in human capital for a growing knowledge economy

#### INTRODUCTION

Government has agreed on 12 outcomes as a key focus of work between now and 2014. Each outcome has a limited number of measurable outputs with targets. Each output is linked to a set of activities that will help achieve the targets and contribute to the outcome. Each of the 12 outcomes has a delivery agreement which in most cases involve all spheres of government and a range of partners outside government. Combined, these agreements reflect government's delivery and implementation plans for its foremost priorities.

This delivery agreement is a negotiated charter which reflects the commitment of the key partners involved in the direct delivery process to working together to undertake activities effectively and on time to produce the mutually agreed-upon outputs which in turn will contribute to achieving outcome 5.

The delivery agreement provides detail to the outputs, targets, indicators and key activities to achieve outcome 5, identifies required inputs and clarifies the roles and responsibilities of the various delivery partners. It spells out who will do what, by when and with what resources. The outcomes apply to the whole of government and are long term. While the delivery agreement may contain longer term outputs and targets, it also includes outputs and associated targets that are realisable in the next 4 years.

It also considers other critical factors impacting on the achievement of outcome 5, such as the policy, legislative and regulatory regime, the institutional architecture and decision-making processes and rights, the resources needed and re-allocation of resources where appropriate.

This Delivery Agreement will be reviewed annually in the light of learning by doing as well as monitoring and evaluation (M&E) findings. Accordingly it will be refined over time and become more inclusive of the relevant delivery partners.

#### 1. HIGH LEVEL PROBLEM STATEMENT

The key issues arising from university education are informed by evidence that universities are producing an inadequate number of appropriately skilled and qualified people in subject matters that are considered central to economic development. In addition, data shows that there are an inadequate number of people qualified in and conducting research at the knowledge production end of the education system.

### 2. IDENTIFICATION OF DELIVERY PARTNERS

A critical challenge for the Department is that universities, as the main delivery partners in university education, are autonomous institutions with their own statutory governance structures. The DHET leads in the development of policy, establishment of legislation and manages the funding framework to achieve policy goals. It is necessary to work in partnership with these institutions, and to develop

strategies that have the support of the stakeholders. The DHET needs to find improved mechanisms for ensuring that policy objectives are translated into practical implementation plans within universities.

In addition to the universities themselves, there are linkages to SETAs, professional bodies and other structures, including cognate government departments such as Basic Education and, Science and Technology, who are engaged with employers in various partnerships to achieve qualified and competent staff entering professions and maintaining standards through ongoing professional development. There are also research bodies that lead knowledge management in their sphere of academic and research engagement that need to be part of transformation at the higher end of the education system.

Because progress is so much dependent on consensus building and hegemony of ideas, the engagement of social partners and community stakeholders is important. Organised employers and organised labour together with youth and student structures play an important role in shaping not only University Education itself, but the way that universities is understood and respected in society for the contribution they make. The executive principals of state who will be instrumental in meeting these targets include:

Minister of Science and Technology
Minister of Basic Education
Minister of Trade and Industry
Minister of Agriculture, Fisheries and Forestry
Minister of Health
Minister of Economic Development
Minister of Finance

#### 3: LINKING OUTPUTS TO OUTCOME 5

## 3.4 OUTPUT 4: TO INCREASE ACCESS TO HIGH LEVEL OCCUPATIONALLY DIRECTED PROGRAMMES IN NEEDED AREAS.

This output speaks to "need" and "access".

Currently, the university education sector uses multiple means to identify priority programmes needed to grow the economy. Amongst these are student demand, teaching and research capacity, funding possibilities as well as a conducive policy and regulatory environment. HE's purposes of knowledge production, knowledge dissemination and community engagement are intrinsically linked to the social, cultural, political and economic development of society. A nation's development is subjected to different pressures at different times. The decisions taken today may have long term unintended consequences, some of which may be undesirable. It is therefore crucial that as the system plans to implement this targeted intervention, the shape and size of the system as a whole not be skewed disproportionately, but that all fields of intellectual enquiry be sustained and strengthened. The

development of appropriate mechanisms is addressed in output 1, but there will be a need for the university sector to find a way of systemically engaging in the identification of economic need, including alignment with other government processes such as IPAP2, the National HRD Strategy and the National Skills Development Strategy. The priority areas identified in the sub-outputs are generally accepted as being critical. However, these are specific growth fields that are targeted and a more nuanced understanding of labour market needs is required, which, it is anticipated, will come from debates and processes put in place under output 1, though it is important for the university sector to pro-actively engage in these processes.

The second challenge in relation to output 4 is that of access. On the one hand, access relates to the availability of places in relevant programmes; on the other hand, it relates to the constraints (social, academic, geographical and financial) facing the majority of (formerly and currently) disadvantaged university applicants. Access and the provision of expanded opportunities and qualifications are not achievable by simple mechanisms such as quotas or increased subsidies for priority programmes. It is not sensible to increase student numbers in programmes where the throughput rates and graduation rates are low and where the standards of the qualifications obtained are being questioned by employers and others.

The stakeholders will need to address the challenge of the poor number of National Senior Certificate holders/high school graduates and those qualifying with a National Certificate Vocation at NQF level 4 who attain the required levels of competence in the identified priority areas. Attention will need to be given to post school education opportunities, including bridging programmes and longer periods of study (e.g. allowing 5-6 years for a degree that would normally take 4 years). Universities will also have to start unpacking the causes of poor performance, and create solutions to internal blockages, such as financial exclusions, curriculum rules, quality assurance mechanisms, in order to strengthen opportunities for students to succeed and graduate. All the available solutions have costs attached and difficult choices will need to be made.

For some of the identified priority areas, the academic qualification is but an entry into the profession. Professions such as engineering and the health sciences require graduates to submit themselves to the professional discipline for a number of years as a condition to being granted accreditation and registration as a professional. The time entering university to registration as a professional can take anything between 5 and 10 years.

### **Sub-outputs**

Planning of the HE system at a macro level requires credible data, specifically on the economy and more particularly on labour market needs. It is likely that with improved labour market analysis and forecasting (output 1), additional needs will be identified. For now, the four identified priority areas will be the focus of attention within the Department. The strategies and measures designed to achieve graduate increases in these four areas will be able to be applied in other areas as well. It is likely that the measures will be of an experimental nature with lessons being learned and changes being made incrementally.

It must be borne in mind that achieving this output and the sub-outputs alone will not achieve outcome 5. In addition, attention will need to be given to issues relating to curriculum, course design, industry linkages, teaching staff and the workplace learning or professional experience component, as well as funding issues and issues relating to access. However, if the correct inputs and activities can achieve the planned outputs and stakeholder buy-in can enable a level of sustainability, then the outcome has a high probability of being achieved.

# 3.5 OUTPUT 5: RESEARCH, DEVELOPMENT AND INNOVATION IN HUMAN CAPITAL FOR A GROWING KNOWLEDGE ECONOMY

There are inadequate numbers of graduates, and in particular black, female and disabled graduates, at Honours, Research Masters, Doctorate and Post-doc level.

The current funding, institutional and management systems are not conducive to expansion and need to be reformed.

The sub-outputs focus on the achievement of specific targets in respect of qualifications at the level of Honours, Research Masters and Doctorate, and if achieved, will enable significant progress to be made. However, the achievement of targets alone will not in themselves create a knowledge economy or improve the global position of SA in relation to publications and inventions that in turn willincrease the county's global competitiveness. Changes are needed in industrial and economic policy and strategy, in the role of government in the various economic sectors, in breaking out of the enclave or dual nature of the SA economy and other factors such as access to investment finance, infrastructure, the taxation system and the value of the currency.

The focus of the DHET will be the development of partnerships and understandings with other role players in the knowledge economy on the one hand and, the creation of a culture of academic excellence and research publications on the other. Mechanisms will be put in place to encourage and incentivise graduates in Bachelors' degrees to stay on and pursue Honours and Research Masters' degrees. In certain instances, our institutions will also co-operate and work with statutory research agencies e.g. the CSIR and the HSRC, where Masters and Doctoral students will be placed, through internship arrangements, and jointly supervised. Masters students in particular must be encouraged to conduct original research and publish papers. The funding mechanisms for such activity will be reviewed and support structures strengthened.

### 4. ACTIONS NEEDED TO ACHIEVE EACH OUTPUT

4.1 OUTPUT 4: INCREASE ACCESS TO HIGH LEVEL OCCUPATIONALLY-DIRECTED PROGRAMMES IN NEEDED AREAS

## What will need to be done differently?

In March 2007, the Minister of Education approved unique, differentiated enrolment as well as output targets for individual institutions to be reached in 2010. This enrolment planning model recognises the diversity of the university education system and accepts that a uniform set of planning goals and targets cannot be applied across all institutions since the circumstances of each university vary in terms of the types of students they attract, the preparedness of the students to successfully participate in the teaching and learning experience, the qualifications and the experience of academic staff as well as the teaching and research infrastructure and equipment. During this process, additional funding allocations in the form of earmarked funding were made available to assist the institutions to reach their specified approved set of targets.

A strategy of differentiated growth in line with the individual capacity of universities, supported through specific funding allocations, was implemented. The principle adopted was one of "differentiated growth within the availability of planned resources". This approach required universities to contribute through individual targets to the planned 2.1% systemic growth for the university education system.

A process to determine universities' enrolment targets for the academic year 2013 has been initiated, based on the same principles applied in the previous cycle. However, the current process has been strengthened and is nuanced to take into account a) success rates, b) graduate rates, c) the PQM of the institution, d) infrastructure spend, e) need and demand in specific programmes. The importance of this process is the determination of future enrolment and output targets for the academic years 2011, 2012 and 2013. The enrolment targets will impact on universities' teaching input funding for the financial years 2013/14, 2014/15 and 2015/16. It is envisaged that this cycle (for determining enrolment targets) will commence in August 2010.

It is imperative that the enrolment planning process takes cognisance of the country's human resource development requirements and institutions align their targets with national priorities to address high level skills shortages. The current differentiated targeted approach to enrolment planning allowed institutions to set their own and unique enrolment targets appropriate to their particular circumstances and capacity but within systemic parameters that are aligned with national and regional priorities. This allowed for greater flexibility in institutional growth according to the systemic set of planned parameters such as success and graduation rates and ratios of enrolments in major fields of study. The individual targets were agreed upon by recognising institutional infrastructure and human resource capacity constraints.

Much of the above is work in hand, and is expected to significantly increase student enrolments over the next four years. However it is important to note that on average only 13% of enrolled students obtain a degree, and so there also needs to be increased efficiency in the form of reduced drop-out rates and improved pass rates. This is important both in terms of achieving the targets, but also in terms of the credibility of the sector in relation to demands for increased funding, and in relation to perceptions of quality in relation to the products of our university system. There will therefore need to be a systematic review of the capacity of universities to achieve improved pass rates and produce quality graduates.

Each university faces a different set of challenges in this respect, and so it is proposed to repeat the process used to set admission targets to develop institutional plans to address the challenges to completion and qualifications and to increase this 13% figure to 14%, 15% and 16% over the next four years. For example, in some universities the problem is in the first year with students unable to engage in course work at the required level. Foundational work such as bridging and other programmes will need to be developed. In others, student drop out is linked to disrupted or inadequate funding, and so attention will need to be paid to this. In some programmes, qualifications can only be achieved after a

level of practical work experience, but students do not find appropriate placements, and so mechanisms will need to be developed to facilitate this. Monitoring mechanisms will be put in place that establishes progress in implementing all aspects of agreed plans.

## Key activities

There are a number of activities that cut across all four sub-outputs. These include:

- Reviewing NSFAS allocations and ensuring alignment to targets.
- Reviewing NSFAS policies and processes so as to ensure that drop outs related to inadequate or disrupted funding are reduced and that where appropriate, longer periods of study are accommodated.
- Working with HESA and the CHE to develop a strategy for improving academic staff qualifications and teaching competence across all universities.
- Working with HESA to develop a broad charter that will provide a framework for improving quality and output within the system.
- Working with individual institutions on enrolment planning and putting in place mechanisms for improving the throughput and graduation rates which will take into account the specific outputs.
- Establishing an M&E framework to report on these outputs.
- Improving communication and awareness within the entire supply chain working with relevant employer organisations, professional bodies and the Department of Basic Education to motivate teachers and learners to achieve improved performance and quality in the priority fields. An important aspect of this will be establishing closer linkages between the industry sectors and teachers and learners in schools, colleges and universities.
- Developing a research agenda that will help identify challenges and potential solutions in relation to the capacity of the sector to achieve the sub-outputs.
- Improving data/information systems so that it is possible to distinguish between new enrolments, repeats, progressions, etc. Individual institutions have this data, and DHET will develop a system to record the data in a better way, enabling improved monitoring reports.

In relation to specific sub-outputs the following activities will be prioritised:

### Sub-output 4.1: Increase the graduate output in Engineering Sciences to 15,000 per annum by 2014.

In order to increase the graduate output in Engineering Sciences to 15,000 by 2014, the infrastructure spend on engineering will be increased to augment the infrastructural capacity of institutions.

Industry linkages will be improved to enable improved levels of applied learning and professional work experience, increased levels of industry experience and knowledge amongst lecturers. The institutional mechanisms in each of the universities for achieving this will be examined and strengthened.

DHET will meet with universities to develop strategies and plans around how to improve enrolment, throughput and graduation rates for all fields in this output. DHET will also meet with engineering employers to explore industry linkages. Examples include investing in foundation programmes, including bridging courses, and improving the qualifications of staff.

Preliminary meetings have already been held with the Engineering Council of South Africa (ECSA) and other related engineering bodies (e.g. South African Institute of Civil Engineering) to work together to develop a consolidated plan to increase access as well as improve the throughput of students. It will be important to work with the Dept of Basic Education, so as to enable a coherent message to be communicated to teachers and learners in relation to what needs to be achieved at school level to enable entry to programmes leading to the qualifications and employment in the prioritised professions.

## Sub-output 4.2: Increase the graduate output in Animal and Human Health to over 15,000 per annum by 2014.

Infrastructure spend will also be increased at institutions offering Animal and Human Health qualifications. Animal health grants will be increased, as well as clinical training grants.

DHET will signal to NSFAS to earmark a percentage of the funds allocated to the University of Pretoria and the University of Limpopo to go to rural students who want to study veterinary science. NSFAS would therefore be the main vehicle through which incentives to such students will be provided.

DHET will meet with the Department of Health regarding increasing grants for clinical training, and will meet with industry employers to discuss placement opportunities and supervised professional experience for graduates. A joint review committee between the departments of health and higher education and training as well as treasury recommended that amongst others, the management and governance of the health professions training and development grant, be migrated from the Department of Health to the Department of Higher Education and Training in order to bring about greater synergies between the training needs and the placements of health professionals.

If it emerges that there are debilitating institutional constraints (for example, if there has been a severe loss of suitable academic staff, resulting in an inability to achieve increased student numbers), then the possibility of funding a number of placements in foreign universities will be explored.

A meeting with the Department of Agriculture reached the following conclusions:

- The legal framework of agricultural colleges needs to be in place as their qualifications are not registered on the NQF. The qualification was in the previous dispensation being accredited with SERTEC. It was discussed that the process need to be determined whereby this programmes needed to be audited and registered.
- 2. It is recommended that an Indaba be held between the Department of Agriculture , the universities and the DHET, where the following issues can be engaged with :
  - Understanding the contribution of each sector with regard to the provisioning of scarce skills within the agricultural study field with specific reference to animal sciences.

- Understanding the challenges experienced by the public providers to increase graduate output and enrolment growth.
- Understanding the strategic possibilities within the agricultural fields (animal sciences) in relation to the Minister's target

### Sub-output 4.3: Increase the graduate output in Natural and Physical Sciences to 8,000 by 2014.

DHET will also meet with institutions to address how those with low performance in the physical and natural sciences disciplines and who are being given money for foundation programmes in these fields, and who have been given increased funding for infrastructure can grow their graduation rates. The Department will meet with universities to create linkages between science faculties and related industries and also align its strategy with that of the DST.

## Sub-output 4.4: Increase the graduate output in teacher education to 12,000 by 2014,

The current production of new teachers for the Basic Education system is insufficient to meet the needs of the system, with current production at 6,000 teachers per annum and an estimated need of approximately 18,000 per annum, specifically in priority areas including Foundation Phase teaching in various indigenous languages, science, mathematics, mathematical literacy, arts and culture, and technology subjects for the senior and FET phases, and the production of teachers willing to teach in rural and economically deprived contexts.

Output according to HEMIS for 2008 was a total of 5,939 initial teachers (of these, 3,997 graduated with a B Ed and 1,942 with a PGCE).

However, there has been a steady increase in enrolments over the past few years linked to the implementation of the Funza Lushaka Bursary scheme and the infrastructural improvement for teacher education. A recent survey of institutions shows that between 2008 and 2009 there has been an overall increase of 25% in enrolments and at the same time a 37% increase in first time enrolments in teacher education programmes.

In order to meet the target of 12,000 graduations in 2014, the total enrolment must be increased to 65,000 by 2014, in other words, an increase of 82% in total enrolments between 2008 and 2014. Given the estimated first time enrolment in 2009 as 16,200 (an increase of 37% from 2008 across both programmes) this increase may be achievable as long as the enrolment planning favours the PGCE programme for FET teachers. This achievement would be dependent on a number of specific factors: infrastructure, particularly student housing to enable rural students access; student loans through NSFAS for financially needy students who meet the entrance requirements; increased support through the Funza Lushaka scheme (which currently finances 25% of all initial teacher education students); enrolment planning with institutions to ensure that institutions are steered towards putting effort and resources into initial teacher education programmes, and reduce their focus on upgrading programmes such as the NPDE and various ACEs. It will also be important to focus on improving teaching and learning to support student success.

## **Evaluation of the legislative environment**

No changes to existing legislation are envisaged at this stage. The DHET would be required to closely monitor and evaluate the admissions policies and other academic policies to ensure synergy between national priorities and institutional practices. However, it may be necessary to review the requirements for professional registration for specific occupations which is regulated by professional councils such as ECSA and the HPCSA enshrined in legislation.

## **Evaluation of the existing regulatory framework**

The above would apply in this instance as well.

## **Evaluate the existing institutional arrangements**

Universities are autonomous institutions, but accountable to the public. The Minister of Higher Education and Training ought to be in a position to financially reward those universities who meet national goals – to create performance incentives. Notwithstanding this, universities with demonstrated strengths in any of these areas should be targeted in order to consolidate those strengths and thus enhance the possibility of success. As has been outlined, it is intended to meet each of the universities and to develop an agreed plan for the improvement of throughput and graduation levels. Improved funding will be closely tied to the implementation of plans. Monitoring and reporting will be improved to enable implementation challenges to be identified and action to be taken where necessary.

## Evaluate the management systems, processes and skills

Implementation for meeting these targets primarily resides with universities. Many universities are faced with human capacity constraints in both the teaching and research arenas. Improved graduation rates are subject to internal efficiencies including policies dealing with financial exclusions, how the curriculum is organised and optimising placement in industry for work experience amongst others. Discussions will take place with CHE to develop joint approaches to evaluating institutional quality management systems and processes, and identifying and addressing skills gaps.

## Funding framework

Enrolment targets have to be matched to available resources to enable the university sector to deliver its teaching and research mandate. An earmarked grant of R3.265 billion has been allocated in 2010/11 and 2011/12 for improving institutional infrastructure and student output efficiencies. This amount has to be used in ways that would lead to increases in the numbers and quality of graduates in engineering, life and physical sciences, teacher education and the health sciences. Improved provision had also to be made for students in official student residences. Institutions will in terms of the approved projects add R2.247 billion to the government allocation of R3.265 million, raising the total 2010/11 and 2011/12 investment in the infrastructure of the universities to R5.547 billion. The total amount was allocated using a percentage for each of the following priority areas: architecture and the built environment (3%), engineering in universities (10%), engineering in universities of technology and comprehensive universities (17%); health sciences (15%); life and physical sciences, in undergraduate and postgraduate programmes (20%); student housing (20%) and teacher training (15%).

An earmarked grant of R330 million in 2010/11 and R350 million for 2011/12 has been allocated for improving clinical training. There is a list of programmes, including programmes in nursing and clinical

programmes offered by universities of technology and comprehensive universities for which the grant can be used and the formula is based on head count totals of students in programmes which require students to have access to the patients, staff and facilities of provincial hospital services.

An earmarked grant of R106 million in 2010/11 and R116 million in 2011/12 has been set aside for veterinary sciences to assist the University of Pretoria and three other institutions involved in the provision of veterinary specialisations to meet the operational costs of clinical veterinary training, in the absence of contributions from the Department of Agriculture. The intention is also to assist institutions to change the equity profiles of their students, to improve the distribution of veterinary specialisations through institutional co-operation, and to increase the numbers of students completing veterinary degrees.

Government is supporting the national priority of access to, and affordability in, university education through NSFAS. A committee appointed by the Minister of Higher Education and Training in June 2009, reviewed the policies, strategies and operations of NSFAS in order to advise the Minister on the strengthening of NSFAS. The Minister will be presenting a set of recommendations to Cabinet in August 2010, which will outline the Department's implementation plan and strategy in pursuance of government's identified objectives of broadened access linked to success. The approved funding for NSFAS for the period 2011/12 to 2013/14 is R 5 593 million. It is estimated that the increased funding will lead to more comprehensive funding for students as well as allow for an additional 10 000 students on a year-to-year basis being funded. NSFAS, however, cannot be considered in isolation from broader funding considerations, and specifically that related to student fees and the full cost of study.

# 4.2 OUTPUT 5: RESEARCH, DEVELOPMENT AND INNOVATION IN HUMAN CAPITAL FOR A GROWING KNOWLEDGE ECONOMY

## What will need to be done differently?

## **DST-DHET COLLABORATION**

The Department of Higher Education and Training and the Department of Science and Technology have established a joint working committee as the implementation forum for this output; which will be co-chaired by the Deputy Director General for Universities in the DHET and the Deputy Director General for Human Capital and Knowledge Systems in the DST. This working committee has accepted the output targets in this delivery agreement and has further identified a number of areas which will form the basis of joint engagement for the duration of this agreement. These areas include but are not limited to the following:

Improved planning and support for the increased production of honours, masters, doctoral and
postdoctoral graduates for the national system of innovation. Particular attention will placed on
improving the equity profile of graduates and increasing the graduate output in scarce and critical
knowledge domains.

- 2. Improved planning and support for the provision of research and innovation infrastructure for universities
- 3. Improved support to enhance technology development and innovation at universities
- 4. Sharing of management information and data for planning, monitoring and evaluation
- 5. Ensuring policy alignment and synergy to support research, scholarship and innovation at universities.

The following are the specific and additional initiatives of the two Departments that will support the realisation the specific targets in this delivery agreement.

## Sub-output 5.1.1: Increase the output of honours graduates to 20,000 per annum by 2014.

DHET, working in concert with the DST will discuss and agree with institutions, through the cyclical enrolment planning exercise, on the total number of enrolled students and graduates. Priority will be given to changing the equity profile of graduates and maximising the graduate numbers in scarce and critical knowledge areas.

The DST will increase the proportion of students receiving financial support to study for bachelor honours degrees. Currently the DST through the National Research Foundation only supports 2.5% of all registered Bachelor Honours students. The intention is to increase it to 5% by 2014

### Sub-output 5.1.2: Increase the output of research masters graduates to 4,500 per annum by 2014.

DHET, working in concert with the DST will discuss and agree with institutions, through the cyclical enrolment planning exercise, on the total number of enrolled students and graduates. Priority will be given to changing the equity profile of graduates and maximising the graduate numbers in scarce and critical knowledge areas. DHET will improve the information available on areas of research need, and possible funding sources for research. The Department will explore mechanisms for funding research Masters degrees in priority research areas.

DHET will communicate to institutions in clear terms the importance of strong research methodology training for post-graduates, and discuss with HESA and CHE how standards for research can be raised. In some institutions, this may necessitate improving staff qualifications.

The DST will increase the proportion of students receiving financial support to study for research masters degrees. Currently the DST through the National Research Foundation only supports 6% of all registered masters students. The intention is to increase it to 10% by 2014.

## Sub-output 5.1.3: Increase the output of doctoral graduates to 1,350 per annum by 2014.

DHET will explore (in consultation with National Treasury) possible incentives to employers, such as tax deductions, to encourage staff to engage in doctorates.

The DST will increase the proportion of students receiving financial support to study for doctoral degrees. Currently the DST through the National Research Foundation only supports 14% of all

registered masters students. The intention is to increase it to 18% by 2014. In addition, the DST will review the level of support to support and encourage full time study of doctoral degrees, with the long term intention of ensuring that the average age of completion drops from 45 years to 30 years or younger.

## Sub-output 5.1.4: Increase the output of post-docs to 600 per annum by 2014.

There is a need to strengthen reporting in the area of post-docs. DHET will conduct annual monitoring and discussions with institutions to feed into a Ministerial document that is sent to each institution.

The DST will increase the total number of postdoctoral fellows at universities and science councils as a means of encouraging doctoral graduates to pursue academic and research careers, while augmenting the supervisory capacity of universities.

### Sub-output 5.2: Provide increased support to industry-university partnerships.

In order to provide increased support to industry-university partnerships, DHET and DST will meet employer organisations, both national and in sectors, to explore funded research opportunities.

The DST working in concert with the DTI intends strengthening programmes such as the Technology for Human Resources and Industry Partnership (THRIP) which is designed to strengthen industry and university linkages.

## Sub-output 5.3: Increase investment in research and development, especially in the science, engineering and technology sector.

In order to increase investment in research and development, DHET will develop a national labour market research agenda and plan, and a strategy with a budget. The Department will explore the possibility of tax (deductions?) and other incentives to encourage research.

## 5, INDICATORS, BASELINES AND TARGETS FOR OUTCOME

See Attached Table

## 6. SYNOPSIS OF KEY ACTIVITIES

See "Key Activities" under 4.

## 7. RISKS, CONSTRAINTS AND MITIGATION STRATEGIES

#### Risks include:

Preparedness of learners (NSC and NCV graduates) to undertake university studies

Limited number of learners (NSC and NCV) who pass Mathematics and Physical Science at the required levels for admission into the priority programmes of study

Inability to secure work integrated learning placements for learners where this is a requirement to complete the qualification, mostly in the Diploma programmes

Unqualified and under-qualified teaching staff at the universities

Heavy teaching loads leading to little time for research and research supervision

Facilities such as libraries, science and computer laboratories being below standard at a number of the universities

Increased competition from industry for first degree graduates, particularly in the Engineering disciplines

#### **Constraints**

A budget that competes against other equally pressing government priorities

Qualifications and capacity of academic staff at our public universities

Limited resources in DHET to manage, monitor and evaluate the policy directives of government

#### 8. APPENDIX A: RESULTS CHAIN

Appendix A for agreement 3 provides a list of outputs and sub-outputs indicating the roles and responsibilities of all delivery partners. The outcomes, outputs and sub-outputs, with causal logic, are reflected in a results chain or log frame.

Indicators are also provided for the outcomes, outputs and sub-outputs as well as baseline information and targets.

## 9. APPENDIX B: HIGH LEVEL IMPLEMENTATION PLAN BY SUB-OUTPUT

Appendix B for agreement 3 shows for each output (i) the agreed upon sub-outputs and activities (ii) with the agreed indicators and milestones (iii) by institution (iv) against a timeline.

### 10. SIGNATORIES

The Ministers of the key delivery partner departments will each sign the separate signatory pages together with the Minister of Higher Education and Training indicating acceptance of the agreement.